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REPORT OF THE PROCEEDINGS AT THE

BUCKS

SANITARY CONFERENCE,

OCTOBER, 1894,

WITH AN INTRODUCTION BY

FLORENCE NIGHTINGALE.



AYLESBURY:
PRINTED BY LEWIS POULTON & CO., BOURBON STREET.

NOTE.

As regards the duties of a Sanitary Committee of a County Council under the Local Government Act, 1894, special attention is called to the statements made by

SIR THOMAS CRAWFORD, p. 7, column 2.

MR. FOSBROKE, p. 12.

DR. BULSTRODE, p. 16, column 2.

DR. WHITELEGGE, p. 18 & 19.

MR. G. DE'ATH, p. 20.

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INTRODUCTION

By FLORENCE NIGHTINGALE.

I GLADLY send you a few words of sympathy and of deep interest in what was said and done at the recent Bucks County Sanitary Conference.

It is to be hoped that under the new law we shall see all that was vigorous in the old self-government of former times revived and utilised, together with all that can be added from our modern education, our modern social life, our modern physical development, combined in the active service of the newer forms of local self-government now offered to our Rural Districts.

If there is one thing more than another for which intelligent self-government is necessary it is sanitation.

The laws of health can only be efficiently applied when there is cordial co-operation between those who govern and those who are governed. But this cordial co-operation is really exactly the same thing as self-government.

Obedience by consent is poles apart from obedience under compulsion.

In some cases obedience under compulsion is not only necessary but successful, but the health of a community means the health of each member of it, and by no conceivable amount of compulsion or inspection can the personal cleanliness and personal health of each member be secured.

We look to local self-government as the gospel of obedience by consent, and we hail this gospel as specially applicable to the Laws of Health—laws that come to us from a source far higher than that of any human law, and that are enforced by a sanction of pains and penalties, personal and vicarious, more terrible than those invented for the enforcement of any human code. Nature sends in her bill. A bill that must be paid sooner or later, sometimes by those who incur the debt, sometimes by those, down to the third and fourth generation, to whom has been bequeathed the “*damnosa hereditas*,” and sometimes by others, strangers in every sense but one, that one being the link of a forced obedience to the law of vicarious sacrifice. The poison that has its home in a cowshed saturated by filth, the

existence of which is a callous and wilful violation of a law old as humanity itself, this poison claims its victims among the children living miles and miles away, and the mother who would die to save her child is with her own hands giving it the milk that has been poisoned before it reaches her. Preventible disease should be looked upon as social crime. The cost to a village of an outbreak of fever is immense, least of all in doctors' bills, much more in precious lives sacrificed, in weakened health for those who survive.

The mere cost of preventing crime by educating and rescuing children is recognised to be much less than that of punishing crime and of maintaining prisoners. Money would be better spent in maintaining health in infancy and childhood rather than in building hospitals to alleviate or cure disease. It is much cheaper to promote health than to maintain people in sickness. Bad health and bad lives are too often almost synonymous, while good health, if not synonymous with intellectual as well as physical growth, is at least the essential atmosphere for the growth of every kind of life, including the spiritual. Pure air and fresh water are the free gift given to, and stolen away by, us, the "perfect gift," which costs us nothing, fouled by us at its source.

Add to this plenty of clean milk, and you have the chief essentials for physical health and also for moral health.

Healthy surroundings and temperance are linked together. The devil of dirt and intemperance are linked together. It has been said by some that County Councils have had no power in the past, and will not have very much in the future, to compel those within their jurisdiction to be healthy and cleanly in their habits.

But we began by admitting that from the very nature of the case, compulsion can under no conditions work the changes we want to see wrought by the obedience of consent. Where power cannot reach, "influence" wins her way, and where the rigid law stops dead, there a public opinion, active, intelligent, and educated works wonders by creating obedience by consent. Here County Councils, District Councils, Parish Councils, may we not add "Family Councils," will all co-operate to give to each man and woman the chance to take his and her part in the great march forward, onward, and upward that is to lead us to the higher life.

F. N.

BUCKS SANITARY CONFERENCE.

Reprinted from "The Bucks Advertiser and Aylesbury News."

A SANITARY Conference was held at the County Hall, Aylesbury, on Wednesday, October 31, presided over by Frederick Verney, Esq., Chairman of the Sanitary Committee of the Bucks County Council. Amongst the gentlemen present were Sir Thomas Crawford, K.C.B., M.D., LL.D., late Director-General of the Army Medical Department; H. S. Bulstrode, Esq., M.D., representing the Local Government Board; the Hon. T. F. Fremantle, C.C.; Col. Pratt, Lieut.-Col. Horwood, C.C.; Mr. J. Torr, L.C.C.; E. B. Forman, L.C.C.; Revs. A. C. Woodhouse, Stantonbury Vicarage; Herbert Eliot, Winslow; Randolph Pigott, Grendon Hall; F. G. Kiddle, Buckingham; G. Harford Battersby, Middle Claydon; S. B. James, Northmarston; P. L. Cautley, Quainton; W. Miles Myres, Swanbourne Vicarage; Messrs. E. Terry, C.C.; H. Dodwell, C.C.; R. Wylie, C.C.; A. C. Cooley, C.C.; D. G. Patterson, C.C.; J. R. Wilmer, C.C.; D. Elliott, C.C.; F. W. Woollard, C.C.; E. Hart, C.C.; E. Harper, C.C.; R. Dell, C.C.; H. S. Leon, M.P., C.C.; T. Gurney, C.C.; J. M. James, C.C.; W. Gruggen, Ealing; H. W. Sandell, Leighton Buzzard; E. G. Woollerton, Wendover; G. F. Phillpot, Aylesbury; Charles Hooper, Aylesbury; F. S. Turner, Amersham; Woodfield Eagles, Aylesbury; H. Waller, M.D., Winslow; G. H. De'Ath, Buckingham; Philip L. Benson, M.D., Steeple Claydon; Arthur Whitelegge, M.D.; Johnstone Harris, Leighton Buzzard; A. E. Larkin, M.D., Chesham; H. R. Ruckley,

High Wycombe; W. Shepperson, F.R.G.S., Aston Clinton; W. J. Treadwell, Sanitary Inspector Brackley Union; P. H. Gardner and J. Perrott, London; George Carrington, Missenden Abbey, Great Missenden; A. H. Gray, Chesham; C. B. Russell, R. Sturgess, Wavendon; W. Merry, Southcourt Farm; T. Taylor, Newport Pagnell; W. Robinson, Stony Stratford; Harry Lloyd Verney; F. Crouch, M. M. Hailey, Newport Pagnell; G. Brakspear, Chairman of Henley Union; William Baines, Tring; W. S. Page, Leighton Buzzard; E. Harper, Arncot, Bicester; S. Hearn, Chesham; R. Knight-Bruce, Cheddington; J. Collins, J. Cheese, Amersham; R. Bailey, Berkhamstead; C. Simpson, Tunbridge Wells; G. S. D. Mattick; Thomas Brown, Leighton Buzzard; G. W. Branson, Newport Pagnell; J. C. Coates, Stony Stratford; G. Fell, Aylesbury; M. Hattersley, Bayswater; J. Baker, Slough; J. Simmonds, Stowe; A. Juson, Wendover; Lewis Poulton, Aylesbury; T. F. Vaisey, Winslow; J. H. Bradford, Aylesbury; Herbert Dale, Radclive; J. Smith, Buckingham; C. Branford, Bicester; William Wise, Winslow; W. A. Perkins, Padbury; T. Simons, Northampton; John Gough, Maidsmoreton; G. W. Ingram, Claydon; A. J. Barge, Cowley Lodge; T. G. Lester, Middle Claydon; R. S. Wood, High Wycombe Corporation; H. Wyatt, Aylesbury; J. Milsom, Claydon Gardens; W. J. Morey, Claydon; J. P. Fordham, Risborough; T. East, Risborough; R. Dickens, Aylesbury;

H. Crouch, Aylesbury; R. J. Thomas, Aylesbury; T. J. Calladine, Stony Stratford; E. H. Baylis, Hoggeston; James Dodwell, Aylesbury; A. P. Scrivener, Wendover; etc., etc.

The CHAIRMAN, in opening the proceedings, said: The duty of a chairman on an occasion like this is, as far as possible, to be seen and not heard. I shall be therefore as short as I can; but there are one or two remarks I feel it my duty to make. We are met here to-day as those who are very deeply interested in the public health of the people of this county, and nearly all of us are at work for it, either directly or indirectly. There are a large number of medical officers of health present—the executive officials who constitute our first line of defence against disease. As public officials their highest and most important duty is the prevention of disease, and as medical men they do their best to cure it. We have present many Guardians, County Councillors, and we also have our Health Missioners present, who are doing such good work in the North part of the country. We have also Mr. Leon, M.P. for North Bucks. We are also honoured by the presence of visitors. There are some of our visitors who follow the high and honourable calling of Medical Officers of Health in other parts of the country. We have Dr. Whitelegge from the West Riding of Yorkshire, Dr. Thresh from Essex. I am sorry to say Mr. Fosbroke, Medical Officer of Health for the county of Worcester, has written regretting his inability to attend owing to an appointment in London. We have here also a gentleman representing the Local Government Board, Dr. H. Timbrell Bulstrode. We have two members of the London County Council present, Dr. Forman and Mr. Torr; and we have a gentleman representing a great and important class, the class of distributors of milk throughout the country—I mean the Managing Director of the Aylesbury Dairy Company. We have also present, last but not least, Sir Thomas Crawford (cheers), who will deliver an inaugural address. I should like you gentlemen and the people of this county to know something of the career

of this gentleman. He has spent a long life in his country's service (hear, hear), devoting himself specially to the health of the army. He began as an army doctor in the Burmese campaign of 1852. From there he went to the Crimea, and served with the army there. He next went through the Indian Mutiny, and he has occupied a high position in India as Surgeon-General of the Army there, from which post he was promoted to be Director-General of the Army Medical Department. We owe his presence here to-day to a lady whose name is honoured, not only here, but all over the world—Miss Florence Nightingale (cheers). Miss Nightingale wrote to Sir Thomas and persuaded him to be present, for he told me that he had never succeeded in refusing a request she made of him. Allow me to read a few words which Miss Nightingale has written to me:—"My dear Mr. Verney, God speed your Sanitary Conference. These conferences will be of immense use. Health is really of so much more consequence than disease, though we have only lately found this out. God speed to the medical officers of health, and all the pursuivants of health, lay and professional. God speed to your hard work. Every yours sincerely, Florence Nightingale." (Cheers.) Gentlemen, there is one duty which it seems to me is incumbent upon us to perform, and that is, not to forget those who are absent. We have lost three valued County Councillors since our last health conference in London rather more than a year ago. Many will know the name, and know it well, of the Rev. Mr. Dalton of Eton. (Cheers.) He was a warm friend and an earnest worker in the cause of sanitary reform. Some of us will recollect the extremely interesting and important paper that he read to us at the Paddington Hotel in July of last year. We have lost another man, not less public-spirited, active, and energetic—Mr. Pater, indefatigable, patient, delighting in unselfish trouble for public good. Never was there a more unselfish man than Mr. Pater (cheers), and there was no man who, by earnest work, had won for himself a more honourable position on the

County Council. We have lost another man, whom I am extremely sorry we shall not see again—Mr. Tattam—(cheers)—a man well worthy to represent the class to which he belonged, and a man who won honour by the way in which he performed public work. Gentlemen, we have proof, by the presence of those who are here to-day, that not only parishes, groups of parishes and counties, but that every part and class of the community is linked together by the common interest in public health. (Cheers.) Disease knows no boundaries between parishes, no distinction between high and low. How this has recently been brought home to us in our own county at Stowe, and how it has been brought home to the whole world by what is going on in the South of Russia! We are all watching by the bedside of a monarch who has devoted his life to the cause, to the sacred cause, of peace and truth. (Cheers.) We are here to discuss a few selected subjects which vitally affect the public health of our county, and of all who depend on our county for their food supply. On the cleanliness of our dairies depend the very lives of many who live in towns far removed from here. The care bestowed, or the neglect permitted, means the distribution of the purest and the most healthy food, or the dissemination of subtle and deadly poison. With such issues in our hands as these, can any one accuse us of fussiness or over-anxiety when we demand that all possible precautions shall be taken, and that the laws made, and the rules laid down by the highest authorities, considered as essential for the safety of the community, shall be observed? And if, for a moment, we step aside from the sanitary and examine the economical side of the case, we find ourselves face to face with a competition from foreign countries entirely the creation of the last few years, of which, perhaps, Denmark offers the most striking example. I will quote you some figures from the Foreign Office Reports that come to us from our Consuls in Denmark. In Denmark, in the year 1877, the exports of butter amounted to 19,000,000 lbs., in 1892 they amounted to 45,000,000

lbs., and in 1893 they amounted to 99,700,000 lbs., of which 97,330,000 lbs. were sent to England at a value of £4,700,000 sterling. How is it that the trade of Denmark in dairy produce has grown with that gigantic rapidity? There is no question about it. The trade of Denmark has grown chiefly because of the instruction given by the Government to those who carry out the work of dairies in that country. It also has grown owing to the minute and continuous care in the matter of cleanliness, resulting in the production of milk and butter of the very finest quality, that never deteriorates. There are severe penalties, amounting to imprisonment in the case of anything like adulteration, if it can be found that it is wilful. Careless adulteration is met by money fines.

Here, then, we have a competition stimulated by State exhibitions of dairy produce, which are continually taking place in Denmark, and towards which I understand the Danish Government contribute nearly £1,400 a year in that little country. They have co-operative dairies, and the milk is paid for by the amount of cream found in it, an extremely clever and simple process, by which you ensure the purity of the produce. How shall we meet this competition? There is only one way to meet it—at least, only one straightforward and English way—and that is by ensuring that the quality of our own produce shall be not a bit less good than it is in foreign countries. Do not let us hide our heads in the sand; do not let us think by concealing these facts we shall remedy them. Do not let us be so foolish. Let us meet it like men, and band ourselves together to determine that in this country of ours our produce shall be as good as that of other countries, and that this old county of ours shall take the lead of the dairy-producing counties of England. (Cheers.) Let us remember who is to blame if things are not as they should be. Do not let us blame our Authorities, our Boards of Guardians, do not let us blame our County Council, but let us put the blame on the right shoulders—our own. Let us remember that representative government means what you choose to make it. If the people are

apathetic, those who govern them will be apathetic. If the people stand up boldly, and say these things shall not be, those people who are in authority will never dare to go against their will. Remember it is you, the public, who make the governors, and the governors can do nothing unless they are backed up by public opinion. That is what we ought to feel in a Conference like this. Representative government is something like a large photograph reduced in size, and the reduction is generally a very faithful image of the large number who elect them. Let us try to guide public opinion to a condition and a state which will make every man that ventures to take upon himself the position of an administrator be certain that he is being keenly criticised by those for whom he administers. Then we shall have a healthy feeling running throughout this county, and we shall be quite sure that those laws which ought to be carried out will be carried out, and we need not fear the consequences. (Cheers). One word in conclusion. I hope our debates will be very interesting. I hope there will not be one single word of exaggeration imparted into the speech of any one who addresses us. Our cause is far too good for that. We do not want one single bitter or exaggerated expression; we want to get at the truth in order that we may do ourselves and our generation good. (Cheers). I have received the following telegram from Baron Ferdinand Rothschild: "I very much regret being prevented attending the meeting. Have a large party of friends staying with me whom I cannot leave. Wish every success to the meeting." I have also received letters regretting their inability to attend from Lord Rosebery, Lord Rothschild, Lord Cottesloe, Lord Jersey, Lord Curzon, Lord Battersea, Lord Buckinghamshire, Sir W. Clayton, Sir R. Collins, Mr. Tonman Mosley, Dr. Shirley Murphy, Mr. C. Cotes, and several other gentlemen. I have now much pleasure in calling upon Sir Thomas Crawford to give us his opening address.

Sir THOMAS CRAWFORD, K.C.B., M.D., LL.D., who was received with cheers, said:

I must begin by apologising for appearing before you. It is owing to the fact, as has been already said by Mr. Verney, that I have never been able to refuse Miss Nightingale any request she has made to me. I thought it right, notwithstanding the difficulty I experience in addressing you, caused by a severe cold, to come here to-day. Both Mr. Verney and Miss Nightingale tell me it is not a long classical speech that you require from me, but only, as one who has a more general interest in sanitary work than that of the county, to say a few words of introduction. In Miss Nightingale's letter to Mr. Verney, written in 1891, and since published, she says, after discounting—very wisely, I think—the enormous mass of literature on the subject of sanitation "Health in the home has not been carried home to the hundreds of thousands of rural mothers and girls upon whom so largely depends the health of the rural population. In fact, they do not believe in sanitation as affecting health as preventing disease." I am bound to say, after nearly half a century's experience, much of it spent in the work of education in sanitary matters, I am still forced to admit that within these two or three graphic lines Miss Nightingale has put her finger on what is absolutely required. Let me say it was never more needed than it is at this present moment, because with your County Councils and your Parish Councils just springing into existence you have a machinery provided by Government which ought to enable you to do all that is required; but it won't do it well, nay, it won't do it at all, if that machinery is not in order. The only way to put it in order is to see that the members who constitute this working machine of Councils are properly educated for the work that is before them. I think too much stress cannot be laid upon this point. It is a source of gratification to all who are interested in public health to know that in most of our counties and towns, at the present time, we are getting familiar with Conferences like the present; and I think that good is done by these Conferences in spreading abroad not only useful information, but truths on matters

connected with public health which lie at the root of all proper and efficient reform. Educate, Miss Nightingale says, and she says it effectively, by pointing out the need of education. Now, it is quite true that Government have done what they can in giving us laws which enable local authorities to do all that is needed, but it is also quite true that you will never be able to enforce these laws efficiently unless you get the people to take up the question for themselves, and to lay down the conditions upon which they are prepared to carry out such reforms as their scientific advisers are ready and willing to lay before them. It is the people, therefore, that should be educated—not our excellent Medical Officers of Health, not even our County Councillors, many of whom are eminent for their knowledge, not only in matters affecting the public interest, but also in this special subject. But it is the people who require to be educated. (Hear, hear.) Now, how are you to educate them? I think appeals have lately been made to the Church to take this matter in hand; but I do not think even the Church is taking it in hand in the right way. We have Conferences—I am very glad to see that—and the clergy are making it a part of their work at present to see that due attention is paid to education on this subject; but it is hard to throw everything upon them. Still, moral suasion won't do. What other forces have you got that you can bring to bear upon the people? I am deeply impressed with the fact that the force which is needful is one that touches everybody's pocket. If you can only bring home to them the fact that by neglect of sanitation they lose heavily, and are also taxed heavily, then probably you will get them to understand the importance of the question. There is no doubt whatever, in my mind at all events, that these two points can be demonstrated. It is quite true we cannot lay before the public the actual number of days' labour wasted in consequence of preventible sickness, amongst—shall I say?—the bread-producing people of this country. There are no statistics of sickness, except perhaps in a few of the

private clubs. There is, however, in the public service of this country sufficient evidence to show that if you had statistics on this subject they would carry conviction to your mind. We have excellent returns of deaths; we know all about the mortality; we know fairly well about even the deaths resulting from accidents and preventible causes; but we have not available to lay before the people the statistics of the actual sickness which contributes to impoverish the working classes of this country; and which necessitates our supporting enormous hospitals and dispensaries, and other medical means of meeting the requirements of the people during their inability to work. Some years ago I was very much interested in an address delivered by Sir James Paget at the Health Exhibition held in London in 1884. He came to me to know if I could help him in this matter of statistics of sickness; and I know he wrote to many clubs and societies, and others, with the view of getting information on this subject. What was the result? Sir James Paget, after a most careful and long-continued investigation, came to the conclusion that between the ages of 15 and 65 twenty millions of weeks' work is lost annually in this country and Wales by sickness. Taking the working classes as a separate item, and basing his calculations on the Registrar-General's returns, he came to the conclusion, that of these twenty millions rather more than half consisted of domestic, agricultural, and industrial classes. Estimating the value of that labour at a guinea a week (which is very much under the average that would be represented by the loss, because the loss covers a large number of people who earn a great deal more than that), the loss in money to those three classes amounted to about £11,000,000 sterling. Now, if we could only show in each district, in each county, in each parish, the actual loss the people are sustaining from sickness, I think you would have a very strong argument in favour of prevention. The late Sir Edwin Chadwick stated as his opinion that Sir James Paget put it a great deal too low, and that in London alone, in a

single year, the loss on this account amounted to more than £700,000. I am afraid my time will not admit my going more largely into that subject, although I could show you, by very reliable references, that there are strong arguments which might be based on this actual saving of expense. There is, for example, the condition of the working classes living in the wretched slums of many of our large towns, which contribute very largely to produce the sickness of which an account is given here. Resulting from that there is not only the sickness, the need for hospitals and the expenses resulting from them, but there is also the crime resulting from the condition in which these people live, and the prisons required to shut them up, and the enormous expense consequent on violations of the law; largely attributable to the wretched condition in which large masses of the poor people of this country are housed and live. I trust my remarks will assist gentlemen who are mixing with the people, such as County Councillors and Parish Councillors, to take up this side of the question, and to see if they cannot get rid of that great waste by a comparatively small expenditure. Miss Nightingale, in writing to the village mothers of this county, says, "The cottage homes of England are, after all, the most important of the homes of any class. They should be pure in every sense. Boys and girls must grow up healthy, with clean minds and clean bodies and clean skins; and for this to be possible the air, the earth, and the water they grow up in and have around them must be clean. Fresh air, not bad air; clean earth, not foul earth; pure water, not dirty water." I fancy if she was here to-day, with this programme before her, she would probably add "pure milk," not "adulterated milk." (Laughter and cheers.) These graphic sentences of Miss Nightingale might be taken by any man as his sanitary creed. They cover the most urgent of the needs of the cottagers of England. How are we to benefit by such teaching as that? Well, by carrying information on all these subjects into all the houses,—because in my experience pre-

ventible disease is not limited to cottages alone. (Hear, hear.) The urgent need is to get reliable and useful information scattered among the people in such a way that it will carry home to their minds conviction, and then you will get them to apply such remedial measures as may be necessary. I do not think coercion is necessary. Everything will be done voluntarily as soon as they see what is needed and how it can be done at less expense than is caused by the neglect of it. I have made a note to say something on self-help, but what I have said practically covers it. I would just pass for one minute to the importance of one or two other matters in connection with your work at this Conference to-day. You will have these topics put before you by more able speakers. But with regard to this milk traffic, will you let me give you a little personal experience? I have a large family of children. One morning in the middle of March one of them sickened. I sent for a medical friend who was doubtful about the nature of the case. The second sickened. The next morning my friend came over, and I told him a third boy was not feeling well. He said the first one that sickened had got scarlet fever, and he thought the other two had got it also. I asked him if it was about, and he said he had seen several cases that morning. To make a long story short, we had a large number of cases altogether in and about Blackheath and the next parish, Kidbrook, resulting from the contamination of the milk of a certain dairy. Fortunately my children recovered, after an extremely severe illness, lasting over many weeks. Some of the others were not so fortunate. I hold the report of Mr. Shirley Murphy, the eminent adviser of the London County Council, who investigated the whole matter, and on whose authority I state that the disease was caused by the milk. It is not a mere matter of opinion; it is a matter brought home and proved. How the milk became contaminated Mr. Murphy does not at present see his way absolutely to state; but there is no question whatever it was the milk.

What were the consequences of that outbreak? The dairyman had fifty or sixty milch cows. The dairy was in very good working order, giving very excellent supplies of milk to the district. All at once this dairy is closed by order of the authorities, the whole of his milk is wasted, and as a result the man was very largely and very deeply injured indeed. To him, therefore, the purity of the surroundings of his dairy was a matter of the utmost consequence. With regard to those whose families were affected I will only take the cost. Put away the anxiety, the worry, the pain, the suffering, put away also the grief for loss of little ones, and let it come to pounds, shillings, and pence. In my case I had not to pay anything for medical attendance. The actual cost for nursing, boarding out the other boys who were at school, isolating my children in the upper storey of the house, subsequently stripping and cleansing and redecorating the portion of the house occupied by them to the satisfaction of the Medical Officer of Health, was within a fraction of £50. Now, that in one family is a very serious matter. In addition to that there was the anxiety, spread over seven or eight weeks. We were all put in quarantine. There were very many other things, not only annoying but distressing. Keep this in mind when you talk about your dairies here, and see what importance it has in connection with this great milk traffic in this county. Let it once go abroad that there is the slightest suspicion of such contamination of any dairy in Aylesbury and its neighbourhood, and you will find your dairies closed, and your people partially ruined. People get frightened at the least rumour. I speak with some experience with regard to Aylesbury dairies. I think we get very good milk from Aylesbury (hear, hear), and I am not here to say one word against it, but only to emphasise what is put on your programme to-day, the need of seeing not perhaps that your dairies are reformed, but that they are thoroughly protected in every possible way from anything which might contaminate the milk to the injury of those to whom the milk might

be distributed. It is on that ground alone that I make any allusion to the dairies here. And now, Sir, instead of the few words of introduction I proposed to utter, I am afraid I have trespassed upon your time, but I cannot sit down without thanking you for the opportunity of seeing what is being done by the Sanitary Committee of the County Council of this county. I have seen also some excellent work which is done with the view to carry out this idea of educating the people, and I hold in my hand a pamphlet which in that respect is most valuable. In it you will find a specimen lecture by a lady whom I shall not mention (I daresay she is known to you all here), which ought to be put in letters of gold. It is admirable, nothing could be better; and if your lady visitors and district visitors and others who take an interest in the well-being of the people in this county will only begin with such information as is given by the lady who drafted this lecture, I have no doubt whatever they will soon carry with them public opinion, and that public opinion will be in entire consonance with the desire of the Sanitary Committee to prevent disease where it can be prevented, to save life where it can be saved, and to get rid of the evils resulting from neglect and filth. To this pamphlet, therefore, I attach very great importance; but I see by the report of your last Conference here that others have been doing equally good work, and while I congratulate you on having a staff of officers who are willing to come here and give you the benefit of their experience and show you what may be done with comparatively small outlay, I still desire to add that I think your Sanitary Committee requires strengthening. Support your Sanitary Committees, and do not sacrifice such influence as may be exercised by such meetings as the present. Keep to it, and by knocking at the door of public opinion you will soon open it so wide that the public will be altogether on your side. Coming down in the train to-day I read a speech by a very eminent nobleman who has just been addressing our neighbours down in Edinburgh. I only

refer to his speech for the purpose of reading this sentence from it: "People now live longer, perhaps owing to the growth of medical science, than they used to do, and the burden on the active class of the community is much heavier than it was." Now with all due deference to the nobleman who has uttered that sentence, I would like to say that there is no burden thrown on the people by the increased longevity which results from the work of medical men. Partly by preventive medicine, and partly by curative medicine, the saving of life is enormous; but the increasing longevity of the people, and particularly of the young, who most frequently fall victims to preventible disease, is a direct gain, not a burden. I do not depreciate the value of the enormous advance made by medical

science in these days, but I do appreciate still more the good work done by medical men in forcing the public to see the causes of disease, and to try to remove them. I was rather amused the other day to read in a paper that medical men were the only people who formed a society for the destruction of their own work, by preventing disease. I think, gentlemen, they are a self-sacrificing class; and it is because they see so much suffering and distress among the people, and so much of their labour is devoted to curing disease among the patients who cannot pay them, that they are constrained to do this work for you, and advise you that the best way in which you can invest your spare funds in county, parish, and village, is to invest them in preventing disease. (Loud cheers.)

SANITARY ADMINISTRATION UNDER THE LOCAL GOVERNMENT ACT, 1894.

BY MR. J. F. TORR, *London County Councillor*.

MR. CHAIRMAN AND GENTLEMEN,—In rising to address an audience consisting so largely of experts, I feel that it is not to teach that we have come here from London to-day, so much as to endeavour to learn what you are doing here; and, so far as we may, to communicate to you what methods we in London have been adopting during the last five or six years. The subject-matter on which I am to address you shortly is the sanitary requirements and improvements that are effected by the Parish Councils Act of the present year, 1894. Upon these exclusively sanitary matters I will dwell very briefly, indicating simply what are the subjects connected with sanitation on which the District or Parish Councils will have to exercise control. The questions of drainage, water supply, and matters of that kind have been considered nobody's business in particular; and so, not through any wilful dilatoriness, or desire to neglect sanitary precautions, that which was nobody's business was not done by anybody. The villages,

from the Hall down to the lowest cottage, have been at a level of sanitation which only those who have been in some of the more remote parts of England can fairly understand. So much of this is not to be seen now as would have been seen ten or twenty years back: the railway has been a civiliser, and has relieved crowded localities, so that in most localities the standard of sanitation is far higher than it was. But after this winter a new era will begin. Since 1888 you have had in every county a central body which has worked through its committees; you have had your Sanitary or Public Health Committee; you have had your Finance Committee; and in that way, at any rate in all County Councils, the work has been divided amongst a large number of gentlemen, each one gravitating towards the peculiar duties which he is best qualified to exercise, and, no doubt, so far as the experiment has gone, the County Councils Act has worked well. But the County Councils Act is only an instalment. Only half the original County

Councils Act was ever carried into law. The second part of the County Councils Act of 1888 was with reference to District Councils; and it was intended by Mr. Ritchie that the minor local government should be provided at the same time as the central government of the county. Through the difficulty of passing in its entirety the Local Government Act, 1888, the second part was taken out, with a promise that it should be reintroduced next year and the edifice made complete; but the edifice never was made complete until the present year, 1894. It was found that District Councils alone would not be sufficient. Provision was therefore made for Parish Councils. Every parish with a population of three hundred or thereabouts may have its Parish Council, as of right; and, with the permission of the County Council, even smaller parishes may obtain the right to have a similar Council. Therefore, practically, when I describe to you the functions of Parish Councils it will mean what will be the actual state, after the 15th of Dec. next, of the government of every part of rural England. And the general principle is this, to apply to rural districts, to apply to villages, to apply to waste places between towns and boroughs, the same principles of local self-government that has been found useful and advantageous in all the great towns of England since 1835. The Municipal Corporations Act of 1835 was the firstfruit of the great democratic upheaval known to all—to some by memory and to all by reading—the great Reform Bill of 1832. If it be conceded that the government of the citizens by the citizens for the benefit of the citizens was a benefit in towns, it must be evident that it could not for very long have failed to strike those who were not residents in towns that some form of the same government, adapted to their own needs, was good for them too. Because, as a general rule, I think this may be taken as an axiom: every man and woman knows his or her own need more accurately than anybody else knows it for them. Therefore, the more interest you can get people to take in their own affairs, and the more you can decentralise government,

provided you do not lose the harmony of the whole, the better it is for the people at large. In every village you will be having a little council. It is curious how we go back to the ways of our ancestors. In the old days long ago villages used to be governed by a head man with his little council around him. A duly elected chairman will now be the head man, and he will have the council around him. I hope you will see there the clergyman or the squire of the parish, the doctor of the parish, the village blacksmith, the village shopkeeper, some farmers, some labourers and some women, all working for the general good. We have been told of some important things that have been in the past nobody's business. Let me suggest what a few of these are. They will have the power and opportunity of appointing overseers—very important persons—and they will have the power of appointing and dismissing assistant overseers. They will take over the powers, the duties, the liabilities of the vestry, except so far as these relate to the affairs of the Church or ecclesiastical matters; they will take over also any power transferred by this Act, from the vestries to the meeting, or any other authority. They will also have a power and obligation as to closing churchyards, provided sanitary certificates are obtained; they will have power over the parish books, chests, and receptacles for keeping records of parishes; they will have power over village greens, allotments, and other matters interesting the dwellers in the parish. They will have even power to sell or exchange, or to make arrangements with regard to parish property, with the consent of the Local Government Board in London; they will have power to complain of unhealthy premises; to represent the need for allotments, or for management of allotments, but without prejudice to the electors to do the same. They will have power to execute what are called the Adoptive Acts,—for providing baths, wash-houses, libraries, and all those other things that have been done in towns so long for people where those Acts are already in force. The powers of the present Commissioners will be transferred

to the Parish Council, who will have power to provide buildings for public offices, and for meetings for the public; for utilising the water supply; for dealing with offensive pools, ditches, and drains; for purchasing land, and power to hire land for allotments, both with compulsory powers. They will have power to repair footpaths, and they can obtain any of the sanitary powers of the parochial committee delegated by the District Council; and they have power to complain to the County Council of any sanitary default on the part of their District Council, and the County Council may thereupon step in and remedy the defect. I have instanced here a large number of things that this Parish Council will have to do, and you will at once see that of these much the largest portion are sanitary matters. Such matters as recreation grounds, and so on, I include under the term "Sanitary," because of course they do affect the health of the people; and in regard to offensive nuisances, pools, and water supply, it is quite obvious that they are nothing but sanitary matters. In the same way, complaining of unhealthy houses is obviously within the spirit of what we have been told just now was Miss Nightingale's "gospel of health"—clean houses, clean bodies, clean minds; pure air, clean earth, pure water. If you add to that the adoption of the Adulteration Act and Acts relating to milk, so as to secure pure food and pure milk, you get your gospel of health completed. These are matters which interest the villagers in every sense. I do not suppose any one here thinks that every village will at once produce and present a collection of Solomons who will make no mistakes; but I do say that this Act, with the other Acts which will come in the future to amend any fault in it, gives what is really a Magna Charta for every village. It does put it into the power of the inhabitants to represent what ought to be done for them; it enables you to see a future in which every village, instead of being a dark and dismal place, may be lighted at night by

some inexpensive system of lighting which may be determined upon. It does hold forth hope that every village, instead of having to drink from a possibly contaminated pump or some semi-stagnant supply, will have a good supply of pure, wholesome, fresh water for drinking, for washing, and for extinguishing fire, abundantly running in every direction; and it does hold forth the hope that neither in the houses of the poor cottagers, nor in the pigsties on any of the buildings in that village, will there be any unsanitary conditions; that they will not allow accumulations of filth and the same possible spread of disease as has been allowed before. And I am sure you will find this, that the question of the sanitary condition of a district is not one which alone affects the cottages; it also affects the larger houses. The typhoid fever of the cottages will find its way from the drains of the cottages into the apartments of the lord and his lady, and may slay the firstborn in the cradle of the palace. Therefore, for sanitary purposes, rich and poor, men and women, old and young, have one interest, viz., to carry out that gospel of health that Miss Nightingale has pointed out to us. Having thus briefly sketched to you what the provisions of the Act are, I will leave it to other gentlemen to go into one detail or another; but I do hope you will try all you can in your Parish Councils, and in your District Councils, which will take the place of rural Boards of Guardians, to impress upon them the necessity of each and all working in harmony, towards securing the health of the whole county. I know how it will touch you in pocket and in personal interest. It is, indeed, a matter too serious to be trifled with. I therefore ask every person here to-day to take this matter into his consideration, and that this conference may help to guide the wisdom of the villages, so that the best possible results may be got from every Parish Council. (Cheers.)

BY DR. A. J. SOUTHEY, *Medical Officer of Health to the Eton Rural Sanitary Authority.*

Although the greatest attention is being paid, at the present time, by sanitary scientists and engineers, concerning the best methods for dealing with sewage matter in rural districts, yet, excepting in a few isolated instances, but little progress appears to be taking place in the application of any one of them, so that cesspools and foul drains still frequently work the most deadly mischief by poisoning not only the air but the water in the shallow wells and watercourses in their locality, which are frequently the only supply, not only to the inhabitants, but to the cows yielding the milk, to which so often we hear of disease being referred. This is in a great measure owing to two facts: (1) That the laws under which Rural Sanitary Authorities act, permit of unnecessary delay in the compliance of orders for the abatement of nuisances, and the supply of pure water,—even where waterworks mains are within reach; and (2) That they permit of constant infringement, even if such infringement has caused disease or death, without any penalty being imposed as long as defaulters ultimately comply with them. The first of these facts will be evident when I tell you that what usually takes place when an inspector receives a complaint of a nuisance, is: (1) He has to inspect it; (2) He writes to the responsible person requesting its immediate abatement; (3) Finding that nothing has been done, he reports it to the Board; (4) The Board orders him to serve a notice for its abatement in a time varying from three to ten days (according to what has to be done); (5) The order still being uncomplished, the Board order proceedings to be taken before the Bench; (6) The case can frequently not be brought before the Bench for a week or ten days; (7) The Bench hear the case, order the defaulter to comply, and give him a still longer period to do the necessary work. Now the letting off of these small arms (all, mind, with blank cartridges, except the last) takes on an average about six weeks, during which time the nuisance has to be endured and do whatever harm it may be possessed of doing, in a

perfectly undisturbed manner. The second of these facts, namely, that the laws permit of nuisances arising (free of penalty) as long as defaulters do not refuse to abate them, is at the root of nearly all cases of the pollution of water in wells and watercourses. Now, I say that it is unreasonable to expect that efficient sanitation under such laws can be effected, for the simple reason that they permit of defaulters, who are usually landlords of the small (impecunious) order, doing nothing until the nuisance, frequently producing disease or death, has come into action and carried out its deadly work. Practically, in fact, a man can poison his neighbour with impunity as long as he uses a foul drain, a cesspool, or other refuse matter as his agency. Suppose that the criminal law were so constructed that those convicted could escape punishment by promising "not to do it again," how long would our lives be safe, or our pockets unpicked? Now, what I wish to point out is, that if this state of things were reversed, and a penalty imposed upon defaulters for *omission* to safeguard against nuisances arising, or for carelessness in regard to the general sanitation of dwellings which are let to the poor at frequently an exorbitant rent, there would soon arise a demand in rural districts for the application of some of the many and excellent methods for dealing with sewage matter which we are constantly having brought to our notice by sanitary scientists and engineers. The Sanitary Authority to which I have the honour of acting as Medical Officer has provided itself with the two most necessary agencies for stamping out infectious disease, namely, an Isolation Hospital and Disinfecting Apparatus; besides having adopted building bye-Laws, the Notification of Infectious Diseases Act, the Dairy and Cowsheds Act, and enforced separate closet accommodation for each house throughout the district (without which it is impossible to isolate infectious disease among the poorer orders), and, consequently, have now done all in their power to maintain the health of the population under their charge, while acting under the present laws.

The following letter was sent by Mr. FOSBROKE, in consequence of his unavoidable absence from the Conference:—

OFFICE OF THE MEDICAL OFFICER OF THE
COUNTY COUNCIL,
COUNTY HALL, WORCESTER,
Oct. 29th, 1894.

DEAR SIR,—I thank you for your letter of the 22nd inst., and very much regret to say that I have been unexpectedly called upon to give official evidence at a L. G. B. inquiry, and therefore cannot possibly get to the Aylesbury Conference on the 31st inst. I quite hoped to comply with your request and speak upon "Sanitary Administration under the Local Government Act 1894." The Act will not materially change the duties of local authorities, the powers of District Councils differing but slightly from those of the present Sanitary Authorities. The primary constitution of District Councils, however, will comprise sanitary functions, and not, as hitherto, mainly Poor Law administration. Parish Councils will have defined sanitary powers (sect. 8) (e) (f), and as the services of the local sanitary officer will not be at their disposal (unless by arrangement), it is thought the county medical officer will be called upon to advise on numerous sanitary questions. By sect. 13, District Councils may delegate powers to Parish Councils, and doubtless the latter machinery will frequently be set in motion. On the other hand (sect. 16): (1) if District Councils make default in the enforcement of their sanitary duties, Parish Councils may appeal to County Councils, who can, after inquiry, and they think fit, assume the powers of District Councils. Parish Councils can also make complaint to County Councils (sect. 6) (2) under the Housing of the Working Classes Act 1890, and County Councils in turn may utilize the strenuous powers they already possess under that statute. I quite expect that complaints to County Councils under the latter powers will be much more frequent than they are even at the present time, and will cast onerous duties upon County Councils.

I have been in office four and a half years,

and my work increases by leaps and bounds from year to year, so much so that for two and a half years I have been obliged to retain a clerk proficient in shorthand and typewriting, and well versed in figures. Much of my time is taken up in consultation with local authorities and their officers, investigation of outbreaks of disease, sanitary inspections, action under Rivers Pollution Act and Housing of the Working Classes Act, and sanitary organisation of the county generally, in order to keep sanitary authorities in touch with each other. I am sending you by this post a "Statement by the Chairman as to the work of the County Council for the year ending March 12th, 1894," as follows:—

"The Committee have dealt with the sanitation of the following places—namely, Tenbury (Tenbury Rural Sanitary District), Malvern Link (Malvern Urban Sanitary District), Malvern Wells, Coomb Green (Castlemorton), Holly Green, Hanley Castle (Upton-on-Severn Rural Sanitary District), Upper Mitton (Droitwich Rural Sanitary District), Lower Mitton (Stourport Urban Sanitary District), Clifton-on-Teme (Martley Rural Sanitary District), Bristnall Fields, Beech Lanes, and Farm Load (Warley—West Bromwich Rural Sanitary District), Causeway Green (Oldbury Urban Sanitary District, West Bromwich and Stourbridge Rural Sanitary Districts), Pedmore, Stoke Prior and Webheath (Bromsgrove Rural Sanitary District, Stoke Works (Bromsgrove and Droitwich Rural Sanitary District), Pershore, Great Comberton, Little Comberton, Wyre, Bishampton, Bricklehampton (Pershore Rural Sanitary District), Conderton, Overbury (Tewkesbury), Chaddeley Corbett, Kidderminster and Bewdley Divisions of Kidderminster Rural Sanitary District, Bromsgrove Town Urban District, Bromsgrove Country Urban District, Yardley (Solihull Rural Sanitary District), Bartley Green, King's Norton, Rednall, Rubery (King's Norton Rural Sanitary District), Long Lane, The Hill (Stourbridge Rural Sanitary District). The Local Government Board have, on the representation of the

County Council, investigated the sanitary condition of the Town of Tenbury, and confirmed the opinion previously passed upon the question by the County Medical Officer of Health. The Committee has also dealt with pollutions of the following streams: Rivers Rea, Severn and Stour, Roway Brook, Broadwaters Brook and Halesowen Brook. The Committee agreed with the Stourbridge Rural Sanitary Authority to take the opinion of Counsel on the liability of the latter in the matter of Halesowen Brook, and the Local Government Board has authorised the Sanitary Authority to incur certain expenditure for cleansing the stream. Weekly returns of Infectious Diseases are received by the County Medical Officer, and after classification, issued every Monday to each Medical Officer of Health in the County. The Tewkesbury Poor-law Guardians being the only Sanitary Authorities in the County who have not adopted the Infectious Disease (Notification) Act have been urged to do so, and the County Medical Officer has by invitation conferred with the former Authority on the subject. The Committee have urged Local Authorities who do not possess Isolation Hospitals to provide them, and the County Medical Officer has attended Conferences of such Boards at Kidderminster, Bromsgrove, and Malvern as to the establishment of such Institutions. It is believed that now the Isolation Hospitals Act 1893 has become law the erection of such buildings will be facilitated. A petition was received against the establishment of the Fever Hospital at Stechford by the Birmingham Corporation, but after inquiry the Committee were unable to support it. Model Sanitary Byelaws and Byelaws for securing the decent lodging of hop-pickers have been issued. Some local authorities have adopted and some are considering them. The advisability of extending certain urban powers to rural districts has been brought under the notice of the Local Government Board. A digest of the annual reports of the medical officers of health and inspectors of nuisances in the county has been prepared by the county medical officer, and the committee have called the attention

of the respective local authorities to numerous matters contained therein. The committee having suggested various sanitary amendments to the Local Government Bill, a special meeting of the Council was held at their request to consider them, and subsequently the County Council brought them under the notice of the Local Government Board and of the County Councils Association, and it is satisfactory to notice that several of these suggestions have been incorporated in the measure."

I cannot now, of course, discuss many other details of my duties, but I may add that it is gratifying to find in Worcestershire, that the local authorities readily co-operate with the County Council in sanitary administration.

Under the Isolation Hospitals Act 1893, County Councils have serious responsibilities, and I am glad to say that an Order for the constitution of a Hospital Committee has already been made by the Worcestershire County Council, which is I believe the first of the kind. (See Bromsgrove Hospital report appended.) As I observe that the question of Isolation Hospitals will be discussed at the Conference, may I venture to urge the expediency of County Councils *grouping sanitary districts* for that purpose? since by doing so efficiency and economy will undoubtedly result; large hospitals (within limits) being always cheaper, and better than those for single districts. Having had long experience—since 1875—of the administration of Isolation Hospitals, I wish specially to draw your attention to the Bromsgrove Hospital Report I now send you, and which you will see is signed by that eminent sanitarian, Sir Douglas Galton. If you will turn to page 11 you will notice that I show what long distances (amounting from 10 to 12 miles) patients may be safely removed *in suitable ambulances*. When local authorities once realise *this undoubted fact*, grouping of sanitary districts for hospital purposes will become much more common; and especially so as telegraphic and telephonic communication is now so readily carried out even in country places.

I must again say that I am much disappointed that I am unable to avail myself of your kind invitation, as I should much have liked to take part in a Conference which will, I do not doubt, promote the extension of sanitation in Buckinghamshire. I am, dear sir, yours faithfully,

G. H. FOSBROKE.

County Medical Officer for Worcestershire.

REV. RANDOLPH PIGOTT (Grendon Hall)—Will you allow me from my own experience of things which so nearly touch me as these matters which have been brought before us do, to give you some instances of how in a county like Bucks we have been utterly unable to work anything in the way of a proper sanitary arrangement for the county? The last man who was executed in Buckinghamshire was a man who I had the misfortune to have before me at Brill. On that occasion I acted as Chairman of the Session. The murder entirely resulted from the abominable sanitary arrangements of a home at Piddington. There was only one room for a whole family to sleep in, and that room was so full of smoke, that on that night the murderer was driven out from his home, and, indeed, without any apparent reason, murdered a man for the sake of a watch worth a few shillings. The man was hung. I wrote a letter to the *Times*, which led to a leading article, the purport of which was what a shame it was that these cottages should be allowed. I can tell you that for some one or two years afterwards this cottage remained, and the woman was allowed to live in this house, from which her son had been hung—a mother so debased that when her son was hung she went back rejoicing, and told some people that she had bought a new pipe, which she intended to begin to blacken, because she was actually going to have her son hung. Another case to which I would refer is that of the next parish to where I live, of which a cousin of mine is the chief landowner. They had the most fearful outbreak of diphtheria which has probably been known in any little country village. The surroundings were so

terrible that not only was there a local interest aroused, but several of the London papers sent down reporters, and there was a book written upon health in our country villages, in which the condition of this village of Quainton was prominently brought forward. What has been done? It was clearly proved that the origin of the diphtheria was a drain, and this drain was clearly traced all along the village, and it was clearly traced that wherever this drain went there was an outbreak of diphtheria. I forget how many died. What has been done? Simply nothing at all, although this happened some four years ago. When I say nothing at all, I believe one or two houses were whitewashed. All sorts of unpractical suggestions were sent to London, but nothing could be done, and nothing ever will be done—as far as I can make out nothing can be done under the present system. Now let me first of all point out to you how the Nuisance Officer, or whatever he may be called under the new system, works under the very greatest disadvantages, so that really he can do no good at all. Now who is it that will elect the nuisance officer? Surely those men whom he may be called upon the next day to prosecute for a nuisance. Now is it likely that when a man perhaps gives up another employment and undertakes an office such as this, is it likely that he will go and complain of those ratepayers who virtually provide him with bread and cheese? Some will, and the consequence is, as I know very well a case some years ago in Buckinghamshire, where the man did his work so well that he was quickly got rid of, and a man was put in his place who did no work at all. (Cheers.) These are really practical things. I have felt it strongly for the last thirty years, that the system is utterly ridiculous and unpracticable. What are we to do? It is all very well talking about clean cottages and healthy homes. You make laws, you make regulations, but how ridiculous those laws are. It is said under this new system everything is to be set right. Suddenly an order has appeared that no cottage is to be built unless it can be proved that there is a

good water supply. You might just as well say a man should have no meat for dinner unless he can get some pudding too. Because he cannot prove that he can get a thoroughly satisfactory water supply is a man who is charitable enough—for it is simple charity building a cottage,—is a man who is charitable enough to build a cottage for which he gets no interest at all to be debarred simply because the water is not up to a certain standard. The other day I wanted to build a cottage myself, a most important one for a brick kiln. There was a large reservoir of water recently dug out some 20 feet deep, water which supplied that end of the village very well. I could not possibly get any more water except nearly two miles off. I wanted to build a cottage. I applied and was refused, and so I cannot build the cottage and nobody else can build a cottage unless the water comes up to a certain standard which no one can fix. Was ever anything more ridiculous than that? What are we to do, we who want to build new cottages? Because the water standard is not up to a certain standard—and who is to say what the standard is?—we are not to build cottages. Of course I could say a great deal, but you all know the difficulty. You hear of a case of overcrowding. The relieving officer does his work and complaint is made before the magistrate. The poor wretched fellow is summoned, and he is asked, “How many children have you sleeping in your room?” “Six.” And he is told he must turn out. We had this case only the other day. “Where am I to go to? There is not a cottage to be got anywhere. If you turn me out I must go into the fields. My wife is expecting to be confined: what am I to do?” What would you do? What I did the other day. I said, “We must put it off. I do not know what you are to do really.” Again the case is brought up. The man says, “I have been looking about everywhere; I cannot possibly find a cottage—what am I to do? My wife is worse than ever.” And now an application is made for a fine. The man is out of work: you put on some fine, feeling the whole thing is heart-breaking work, and again the man is summoned.

“Please, sir, I cannot pay the fine, I have no work yet: what am I to do?” And this is to go on for ever, and there is no practical solution. The man cannot be got out: he remains on, and at last the authorities give up the job altogether, and the matter drops through because they find there is no power of getting it done. I will tell you what I think is a practical solution of it. I do not want to talk of myself, but I am a landlord like most others here, and I know we are having very hard times, and I know there was never a time when Buckinghamshire farmers and landlords were harder up than at the present time, and I know perfectly well that an extra heavy rate for all these fine improvements that these people in London suggest, and which look so nice, means practical ruin not only to the landlords but also to the tenants. (Cheers.) What are we to do? Take for instance this matter about milk. Of course there should be good milk; but when you once begin, where are you to end? If sanitary arrangements about milk merely mean whitewashing dairies, and good drains, well and good; but if you once begin this, and carry it to its logical conclusion, you must inspect every pond in Buckinghamshire; and there is not a pond in this district which would pass a medical inspection for this reason, there are hardly any springs; and there is not a single pond which, if you came to analyse it, and go in for what any medical man from London would insist upon, there is not a single pond which would pass, because it is impossible for a cow to drink without more or less dropping into it. I do not mean to say we should not have fresh water to all the villages; but I mean to say, if it is going to be insisted upon, not only will the corn growing be a failure but also dairying. We cannot do it. The only remedy I think is that if it is for the public good that a cow should have perfectly fresh water, and every labourer should have a perfectly good cottage, the Government should help. We can get no interest from our cottages. If you go to a landlord and say to him, “Your tenant has been

summoned three times. Your cottage is abominable," the answer is, "I wish to goodness you would get the man out. I don't want him there. I cannot do anything; I have too many labourers. I want to get the man out, and he won't go." You might prosecute the landlord—I am not sure whether it would not be a good thing—instead of the tenant. That is one practical form. But what I say would be a more practical thing is this: it is quite certain the cottages do not pay; it is quite certain good cottages are a charity; and therefore if we are to have these good cottages, if we are to have these sanitary arrangements, why should not the Government lend the landlords money at a nominal rate? Surely they could do that. If we want money nowadays we go to the Lands Improvement Commissioners and have to pay 10 or 7 per cent. for 20 or 30 years. The consequence is it is a most enormous tax. Therefore I can only say, if we are to be put to all this tremendous expense, and I quite admit something ought to be done, the only practical way of doing it is by the Government advancing money for building cottages at a nominal rate of interest.

DR. H. TIMBRELL BULSTRODE (Local Government Board):—I should like, in the first place, to express the pleasure I have in coming here to-day, and also to thank our chairman for so kindly inviting me. Under the Local Government Act of 1888, the Local Government Act of 1894, the Rivers Pollution Act, and the Housing of the Working Classes Act, there is in existence a system of local self-government which, if put into operation, would bring about very beneficent changes in this country. But the question is, how is this to be done? I think there is one general principle which underlies all these Acts, and that is the necessity for the diffusion of knowledge as to the principles of sanitation. This is the only thing as far as I can see, which will bring about any radical change, or render the Acts referred to fully effective. The great thing is not only to diffuse amongst the electorate a knowledge

of the advantages of sanitation, but more especially to awaken in the administrators of the Public Health Acts a sense of public duty. I think each one in the future who is elected to a Rural or Urban District Council should make it his duty to become familiar with the elements of the subjects he is called upon to administer, and also make himself conversant, if not with all the details of the Acts, at any rate with the general provisions of the Acts which it is the duty of his authority to see carried out. This is one great fact that has forced itself upon me in my work throughout various parts of the country. And, furthermore, I would insist upon the great importance of carrying out the operations of the Acts with as little friction as possible. I know that in many cases there are great interests involved and even very substantial interests, and I think that much valuable work can be done, and in fact is done all over the country, by the operations of Sanitary Committees. It is also most important that any subjects brought before the County or District Councils should be thrashed out in private, and not that all the details should be discussed in public. This is a great point to be kept in view.

Rev. G. HARFORD BATTERSBY (Middle Claydon): No doubt one most important part of sanitary work is in connection with cottages, but that we shall have an opportunity of discussing later on. With regard to the new system which is to be inaugurated, I do feel that a great opportunity now lies before us to do something that has not been done before, and this will be greatly assisted if the Parish Councils that are elected realise the responsibility that lies upon them to do something, at least in the way of inquiry, and that they shall not wait to be stimulated by any one else, but shall realise that the responsibility will lie upon them to at once begin to inquire about the condition of things within their own area. And I would suggest that the Parish Councils of Buckinghamshire should take upon themselves as one of their first duties to appoint a Sanitary Committee, comprising the most competent persons in

the parish; and if the Parish Council is not composed of members particularly competent for this work they should include persons outside their own members. They should appoint a thoroughly efficient Sanitary Committee, which should report on all the drainage of the parish, which should have plans showing the drainage age, and should report also upon the water supply. You cannot improve till you know what you have got. Having done that in the parishes it will remain for the District Councils to take action as far as they can see cause. The Parish Councils, if they find abuses and things that need to be remedied, will make reports to the District Councils accordingly. What is the District Council to do? I would urgently insist that they should endeavour to enforce not an impossible ideal standard, but as far as possible some system of drainage or water supply which shall be most simple and suitable to the requirements of the neighbourhood. And as there is a gentleman here present from the Local Government Board, I would ask him to use his influence with the great authority which he represents here to-day, to establish a clear distinction between the requirements of towns which are necessary where large masses of population are joined together, and the very much simpler arrangements which may alone be provided by the very small funds available in our country parishes. (Hear, hear!) I would also suggest if we have insanitary conditions in our parishes a good deal may be done in the way of voluntary work. Recognise that no man has earned a right to his vote till he is doing something for the community. If we could get labouring men to take particular ditches and ponds under their care, to clean them and keep them in good order in that way, something might be done. Just one other suggestion with regard to the meeting of the Parish Council. If they met regularly once a month, so that everybody in the parish might know that there was a sanitary body ready to receive any complaint, we should hear much more quickly about abuses than we do now. And besides, they

would be much more attended to than if brought before private persons. Therefore we should see that we have in our hands in the Local Government Act of 1894 the means of remedying many of the evils which undoubtedly exist. (Cheers.)

MR. ROBERT DELL, C.C.: There is a question which I wish to ask Mr. Bulstrode. I have been a servant or representative on the Poor Law and the Poor Law Guardians for near upon thirty years, and I sat there as a servant under the Local Government Board, and as Mr. Bulstrode seems to come from the Local Government Board, I should like to ask him a question. The neighbourhood in which I reside is a very poor one, and at the present time our overseer is entered as a defaulter in the collection of the rates from time to time, and as I said on the Amersham Board of Guardians, where we have these sanitary matters occasionally coming forward, I say by all means go ahead and get improvements done. They want doing very badly. But the question in my mind is, as the farming in this country has got into such a deplorable state, and as the trade of this country has followed suit without any question at all, and as we are all of us on the verge of pauperism and bankruptcy, and as all the questions which this gentleman has brought under your notice have got to be done, can he tell me where the money is to come from? (Laughter and cheers.) I have sat on the Amersham Board of Guardians and the Wycombe Board of Guardians, and I have listened many times to reports which have come from the Local Government Board, but I have never been told where the money is to come from, only I have been told it is to come out of the ratepayers' pockets. Now, if the Government of this country would pay for these improvements, instead of coming to the hardworking and the overburdened ratepayers to find the money, I would say, By all means do it. (Laughter and cheers.)

DR. WHITELEGGE, (Medical Officer of Health for the West Riding of Yorkshire): In the first place, like Dr. Bulstrode, I wish to express my gratification at finding myself

present at such an interesting meeting, and I am extremely obliged to you for the kind invitation you have sent me, and the privilege afforded me of being here. In my five minutes, I should like to confine myself to one or two matters of interest that have arisen in the discussion already. It is extremely interesting to me to find that the same problems of sanitation and the duties of County and Parish Councils on regard to them have arisen here as in agricultural parts of the West Riding. We hear the same cry (only too well founded) of agricultural depression; we find villages without drainage, in which nuisances abound, which have not any decent water supply, and villages alongside them which, apparently, with no greater wealth, with no greater resources, with no difference in any material respect, manage to provide themselves with proper drainage and the rest, and to keep their heads above water in spite of the ruinous cost that these things are supposed to entail. I admit that there are occasions when additional expenses cannot be borne; but I submit that the local authority, and even the Parish Council ought not to have the final vote in that respect: some higher authority ought to be satisfied as to the absolute impossibility of paying for improvements which are demonstrated to be necessary for the public health. The Parish Council is to be the village parliament with limited powers of spending its own money. It has power to utilise—and I was hoping to hear some definition from Mr. Torr as to what the meaning of that extremely vague expression might be—to “utilise” any water supply. It has also power to “deal with” certain elementary nuisances; and again I should very much like to know what that means, and how it is to be carried out. But the main point is the power to make a representation to the County Council in the event of default on the part of the Rural District Council in dealing with water supply, or other default under the Public Health Act. I for one do not expect any immediate avalanche of formal complaints of this kind by the Parish Council. I think it is very probable the work of education will

have to go a considerable distance before that comes to pass, but a certain number of these representations will be made, and will have to be considered by the County Council. The County Council, and more especially the Sanitary Committee, ought to be, and I trust will be, the sanitary conscience of the community as a whole, and the duty of sitting in judgment upon complaints forwarded by Parish Councils is only a small part of the work which they can do, and ought to do, to bring about a remedy for the unwholesome conditions of which examples are to be found in any county in England. Mr. Pigott spoke on the village of Quainton. Quainton was heard of even in Yorkshire at the time the outbreak occurred, and we heard that it was in a disgraceful sanitary condition. We heard that complaints had been made to the Local Government Board, that inspectors had been down and recommendations made, and now I must confess I am more than disappointed to hear that nothing has come of all that. I do not know Quainton; I presume it is in a rural district, and will have a parish council——

THE CHAIRMAN: Perhaps I ought to say I have already been asked to answer what has been said by Mr. Pigott just now. There is an answer to be made.

DR. WHITELEGGE: I will assume that there is a complete answer to it. The only use I want to make of it is as a text: if Quainton or any other village in the county is in a bad sanitary condition, the responsibility of that from December, 1894, onward rests not only with the Rural Sanitary Authority — that is, the Rural District Council; it rests also with the Parish Council of Quainton, which has power to set the authority in motion; it rests with the County Council, which has power to act with or without a formal representation from the Parish Council; and it rests with the Local Government Board. The responsibility of the County Council is not limited to those parishes in which sanitary default is forced upon their notice by the Parish Council. Under the new Act the duties of the County Council will be added to, and

their statutory powers largely increased, but their real influence will remain pretty much as before. Their power in the direction of sanitary reform is mainly suggestive rather than coercive, and this is an advantage in some ways, though a disadvantage in others. They are not tied as the Local Government Board are, and as some elected bodies are, by precedent, and they have a free hand. If persuasion fails, they can fall back upon representations to the Local Government Board, under section 299 of the 1875 Act, if extreme measures become necessary. From the little I know of the work of the Sanitary Committee of the Bucks County Council, they seem to have already demonstrated that it is possible to do much, even without statutory powers. The Health Missioners who have done so much good work in the county, are not even mentioned in any Act of Parliament nor are conferences such as the present, which, nevertheless, I venture to think are of practical utility. Coming up here from Yorkshire, I was astonished to hear that the suggestion had been made that the Sanitary Committee was no longer wanted. If ever there was a time when the Sanitary Committee was wanted, surely it is now when, in addition to all the opportunities which they had before, responsible judicial functions are proposed to be cast on the County Council which cannot be undertaken except with the aid of a committee. How are the necessary preliminary inquiries to be made, and the whole of the local facts to be got out otherwise than through a committee, who after deliberation in private will be in a position to place before the Council a report, as the basis of their action. Otherwise blunders are almost inevitable in the direction either of unwise interference or unwise in action, which would be disastrous to the prestige of the County Council. Necessary as the Sanitary Committee of the County Council was before, it is ten times more necessary now, unless you are going to have the County Council abdicate its position and betray the trust which this and other Acts have thrown upon it. (Hear, hear.) In

my own county and several others a medical officer has been appointed. Surely if there is work for a Sanitary Committee when the medical officer is there constantly on duty, it is not less important when there is no medical officer, but when the whole sanitary work of the County Council rests upon a committee alone, which must of necessity be a Sanitary Committee.

THE CHAIRMAN: I think it would be right to offer Mr. Cautley, who is the Vicar of Quainton, the opportunity of making any statement which he wishes to make about Quainton, as that village has been so specially mentioned.

REV. P. L. CAUTLEY: I wish to say a few words with reference to the outbreak of diphtheria in my parish. I had the misfortune of being the rector of Quainton when the outbreak of diphtheria took place. After about sixteen deaths had occurred—and sometimes there were three deaths in a day—I immediately had two maps made out from the Government survey and followed the drain, marking on the map every house in which a death occurred, because I felt the drain was the cause of the outbreak; and nearly every house where death had occurred was either over or in close proximity to the drain. I presented Dr. Thompson and Dr. Phillipot each with a map so marked. I believe I was right in my conjecture, but some thought it otherwise. I showed how nearly every case did not come from the school, but came from the drain; the reason being that this drain was an open drain originally, and I wish all drains were open which take off the surface and waste water. It got closed in with different kinds of pipes, here was run into it the overflowings of pigsties, farmyards, outhouses, &c. I forget who it was that said “dirt is only matter in a wrong place,” but the consequence of it being here in a wrong place made the drain a source of sickness and disease. The drain has now been repaired; all drainage overflows from pigsties, &c., have been cut off, and the water supply has been attended to. Pigsties and out-offices leaning against cottages have been removed, and although we

have not done very much, certain things have been done. Why we have not done more is because Government required us to do some things practically impossible. The kind of drainage which is necessary and practical in a town, is absolutely unnecessary and impractical in the country.

DR. G. DE'ATH (Medical Officer of Health, Buckingham): I should like to add just one or two words to what has been said by perhaps the greatest authority in England, or one of the greatest authorities, on Public Health—I mean Dr. Whitelegge—with reference to the Sanitary Committee for the County Council of Buckinghamshire. You said, sir, in your opening remarks, that the object of this Conference was to consider the health of this great county, and the item on the agenda we are discussing is the “Sanitary Administration under the Local Government Act 1894.” So far as the Local Government Act itself is concerned, I am afraid I personally look upon it as a most feeble, miserable, milk-and-water instalment of what is required: nevertheless, that is only a more or less personal opinion. The Parish Council will have certain sanitary duties. Practically it will be a sort of Sanitary Debating Society, and if it tries to prosecute any sanitary reform it will find it will not have the funds to pay for it. The District Council will replace, I take it, the present Board of Guardians, so far as their sanitary duties are concerned, but the duty of the one great Sanitary Authority remains the same, and also has its duties added to—namely, the County Council. These new authorities will go to the County Council of Buckinghamshire as a model, to see how they ought to carry on their work, and a pretty model it is; the Buckinghamshire County Council! (Laughter.) Why, gentlemen, what has its Sanitary Committee done? It has done the most extraordinary thing; it has had the amazing impudence, the absolute audacity, to frame in the pages of a Report a most lucid and comprehensive statement of the law relating to Public Health, with reference to the duties of the County Council. What is the result? This Report has been quietly

dismissed amidst the applauding acclamation of the Bucks County Council. (Laughter and cheers.) Gentlemen, if this matter was not so serious, it might, perhaps, be made amusing; but I, as one interested in public health in this county, am inclined even to abuse the Buckingham County Council, which Mr. Verney has asked us not to criticise. If we cannot appeal to the members of that Council we must and we shall appeal to public opinion on this matter. It is only here we have to find fault. In every other department of work the County Council has done admirably, splendidly, almost to the complete satisfaction of every one in Bucks—fancy that! (Laughter.) But where it has failed is in the important point with regard to sanitation. The object of this Conference is to consider the health of this county, and I do hope that one of the results will be that there will be got from this Conference a distinct and emphatic expression of opinion that, for the future sanitary administration of the County of Buckinghamshire, the existence of the Sanitary Committee of the County Council is an absolute necessity.

DR. G. PHILLPOT (M. O. H., Aylesbury): In defence of the Rural Sanitary Authority and of myself as Medical Officer of Health, and also in defence of the Inspector of Nuisances, I do consider that Mr. Piggott was much too severe in the remarks he made. From the time of the diphtheria outbreak everything was done that could possibly be done at the time and afterwards to improve the condition of Quainton. The drain that has been referred to was thoroughly repaired, and all the drains running into it were cut off. A system of small cesspools was also advised for the slop water and eventually the whole of the cesspools were done away with and converted into earth closets. Last, but not least, a system of scavenging has been put into operation on the advice of myself and also of that of the Sanitary Inspectors. (Hear, hear!) Only to-day I am advising the Rural Sanitary Authority, which meets to-day, that they ought to repair and close in a drain near the

Station Road. I think that if this system of scavenging is continued, and this recommendation of mine to-day is adopted, we shall be as near as possible to the desired improvement, unless we put the village to such an expense that it will ultimately mean

ruination and depopulation. (Cheers.) The Conference then adjourned for a short time, and the entire company present were entertained to luncheon by Mr. Verney at the Judges' Lodgings.

SANITARY PROTECTION OF THE MILK TRAFFIC.

MR. HERBERT DODWELL: I thank you much for allowing me to say the few words I have to say, inasmuch as I am leaving at once. I shall not detain you more than five minutes, and I propose in what I have to say on this second subject to include with milk, which is here mentioned, the article butter. I think our chairman will allow me to do that, inasmuch as he himself referred to Danish butter. On this question of the sanitary protection of the milk traffic I think as milk producers we are agreed, and, speaking as a milk producer, I can say this, that we with other bodies recognise that it is a most important matter that milk should be produced in a sanitary manner, not only to those who consume the milk, but also that it should be produced under sanitary conditions for our own sakes, because if we produce milk in an insanitary state and under insanitary conditions, it naturally follows that eventually we must lose trade. With regard to the butter question, I rather more prefer to deal with it because our chairman has referred to the fact that great quantities of foreign butter are coming to London, and he has also told us that foreign butter is produced under sanitary conditions, and rather inferred that it was produced under insanitary conditions in England. On the question of insanitary conditions in England I do not propose to say very much, for this reason, that to a certain extent I am afraid I must agree with our chairman; but I would like to put this fact before the Conference, that if we who produce butter and milk, dairy produce, in England are to be put under special conditions, which we admit, mind, is necessary, we ask that we may have the same conditions as far as possible enforced with regard to the produce which comes from elsewhere. (Hear,

hear!) You may reply to me that that is impossible, because you are going to deal with a foreign country over which you have no jurisdiction. I see there a great difficulty, but at the same time I do say that as far as possible such conditions should be imposed that disease may not be disseminated here in consequence of foreign produce coming here. We get a large supply of butter from Brittany. I believe I am right in stating that the principal source of supply for the wealthy classes in London is certainly Brittany. I cannot quite go with the statement that has been made, that that butter—and I must include that with the Danish, because I am referring to that—I cannot agree that that comes here, at all events from the data which I have before me, in an absolutely pure condition. It is by experts stated that it is nearly impossible that it should be so, and for this reason, that the price of butter in the Paris market close to where it is produced, after you have taken away the Octroi duty, is higher than it is actually sold at in London. In July Brittany Butter was sold in Paris by auction at $4\frac{1}{2}$ francs the kilo of $2\frac{1}{4}$ lbs., or about $1/9\frac{1}{2}$ a pound. We know by the daily papers that butter is sold in London retail at $1/4$, and is supposed to be the very best Brittany butter that can be produced. How is it possible for butter to be sold in London retail at $1/4$, when what is professed to be the same article is sold wholesale in France at $1/9\frac{1}{2}$? Would it not seem, from these data given, that there is only one answer to be made—viz., that there must be some adulteration going on with regard to the butter that comes here, which enhances the danger of disease being conveyed by this butter. (Cheers.) That,

I believe, experts are agreed on, because I have read very considerably upon this point, and I could give you the names of experts who are of the same opinion. I give you that opinion for what it is worth, and I ask, as a producer of dairy produce and milk, and speaking in the names of my brethren in the trade—I ask that, whatever restrictions are put on us with regard to cowsheds and the production of dairy produce, as far as possible, we should not be handicapped, for this reason, that if you put us to a larger expense, who is to pay the piper? If we are to have extra expense put on us it naturally follows that we shall not be in as good a position to compete with the foreigner, if he does not have a similar tax upon the production of his products. That is the point I wish to press home: that the condition in shall be alike both cases—foreign and home.

BY MR. W. GRUGGEN, D.P.H., M.O.H. *for the Middlesex and Hertfordshire Combined Sanitary District.*

MR. CHAIRMAN, SIR THOMAS CRAWFORD, LADIES AND GENTLEMEN,—The Dairies, Cowsheds, and Milkshops Order of 1885, and the Amending Order of 1886, have been written upon many times since they were issued, notably in a paper read before the Society of Medical Officers of Health in December, 1886, by Dr. Ashby, Medical Officer of Health of Reading, where he deals with it as affecting rural districts; and in 1888 there was a further paper on the subject by Dr. Shirley Murphy, Medical Officer of Health to the London County Council, upon the sanitary administration of dairy farms.

I propose to look at the question from the point of view indicated in the syllabus of our proceedings to-day—namely, Sanitary Protection to the Milk Traffic—and I hope to be able to show that the legislation we have ought to be honestly carried out, and that it is as much in the interests of the milk vendor as of the public health that this should be done. It may be said that the order of 1885 is badly worded, and that sufficient powers are not given to Authorities. I am quite aware that there are many defects in the

order, but it is childish to say that because we have not greater powers we will not use those that we have. I think we are much too apt to do this, to the detriment of sanitary progress, for no government is likely to give further powers until it is shown that all the powers possessed have been used to the utmost, and a standstill has been arrived at in consequence of the want of further legislation.

Now let us see what is the legislation on the subject. Under section 34 of the Contagious Diseases (Animals) Act 1878, the Privy Council were given power to make orders for the following purposes, namely:

1. For the registration with the local authority of all persons carrying on the trade of cowkeepers, dairymen, or purveyors of milk.

2. For the inspection of cattle in dairies, and for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cowsheds in the occupation of persons following the trade of cowkeepers or dairymen.

3. For securing the cleanliness of milk-stores, milkshops, and of milk vessels used for containing milk for sale by such persons.

4. For prescribing precautions to be taken for protecting milk against infection or contamination.

5. For authorising a local authority to make regulations for the purposes aforesaid, or any of them, subject to such conditions, if any, as the Privy Council might prescribe.

And under this power the Privy Council made the Dairies, Cowsheds, and Milkshops Order of 1885. Under the Contagious Diseases (Animals) Act 1886, the powers vested in the Privy Council under this section were transferred to the Local Government Board, and the order of 1885 has effect as if enacted by the Local Government Board. And it was further enacted that the term “local authority,” unless the context otherwise requires, shall have (except in the Metropolis) the same meaning as under the Public Health Act 1875, thus placing the responsibility of carrying out the order of 1885 upon the

shoulders of the urban and rural sanitary authorities, except in the Metropolis.

In 1886 the Local Government Board made an amending order, substituting the words "Local Government Board" for the words "Privy Council" in article 14 of the order of 1885, and imposing a penalty of £5 for any offence against the order of 1885, and in the case of a continuing offence a further penalty of £2 for each day after written notice from the local authority.

Now let us glance at the order itself. Article 6 (1) makes it illegal to carry on the trade of cowkeeper, dairyman, or purveyor of milk unless registered; and article 6 (2) compels every local authority to keep a register, and from time to time to correct it. Article 6 (3) compels the local authority to register every such person, and provides that registration shall not authorise such person to occupy any particular building, or preclude proceedings being taken for infringement of the order or regulations made under it. Article 6 (4) compels the local authority to give public notice from time to time in the newspapers of registration being required, and of the mode of registration.

Now what is the position of dairyman, cowkeeper, and purveyor of milk in a district where the local authority do not keep a register? Well, he is liable to a penalty of £5 under the order of 1885 for this offence. Some authorities seem to be of opinion that the Dairies, Cowsheds, and Milkshops Order is something that they can adopt or not in their district as they think fit. But this is not the case. An order of the Local Government Board has the force of an Act of Parliament, and as such must be obeyed. Unquestionably a local authority is not bound to make regulations under the order unless it pleases, and no doubt much can be done without them; but it seems only fair to the trade in the district that they should know definitely what is required of them. Article 6, paragraphs (5), (6), exempts certain persons—namely, those that carry on the trade for the purpose only of making cheese or butter, or both, and who do not carry on the trade of

purveyor of milk, and also those who sell milk of their own cows in small quantities to their workmen or neighbours—from registration; but this does not exempt them, it must be remembered, from compliance with the order or with regulations of the local authority.

Next, Article 7 (1) relates to the construction and water supply of *new* dairies and cowsheds, and requires provision to be made to the reasonable satisfaction of the local authority for the lighting and ventilation, including air space, and the cleansing, drainage, and water supply. And paragraph (2) enacts that a month's notice shall be given to the local authority, before occupation of any such building, of the intention to do so. And article 8 provides that it shall be unlawful to occupy as a dairy or cowshed any building, whether occupied at the commencement of the order or not, if the lighting, ventilation, including air space, and the cleansing, drainage, and water supply are not such as are necessary or proper for (a) the health and good condition of the cattle therein, (b) for the cleanliness of milk vessels used therein for containing milk for sale, and (c) for the protection of the milk therein against infection or contamination.

Now let us for a moment see what is said on these questions from the point of view of the dairy farmer. Mr. J. C. Morton, an acknowledged authority on agricultural matters, inveighing against the state of some cowsheds in the country, says of a cowshed that "it is either a clean and tidy place, where both cowmen and their stock are clean, dry, and comfortable, everything in its place, the animals all lying down, being comfortably fed, and the air with no other perceptible odour than that of the chloride which the careful owner sprinkles once or twice a day along the gutter; or" (mark the contrast) "it is a filthy hole." Again, Mr. F. Smith, in his work on veterinary hygiene, says of cowsheds: "The chief points to be attended to are ample cubic space, impermeable flooring, and most perfect arrangements for drainage and ventilation." Again, with regard to the necessity for free ventilation, Professor Sheldon says, in his

work on the farm and the dairy: "Yet are the odours of the cowhouse often traceable in the milk; and it is thought that they get into it by absorption. This may be so, and will be so when the air is warmer than the milk; but they oftenest get into it through the lungs of the cow. It is therefore an excellent thing to have cowhouses well ventilated, and kept as clean as possible." Then again, in regard to the dairy, he says: "The floor of the room should be well laid, in order that there may be no crevices in which spilled milk may lurk and ferment; and the walls should be similarly spoken of; while both should be easy to clean." In another place he says: "Milk is a complex and delicate fluid, quick in absorbing odours, and highly susceptible of fermentive changes. The septic tendencies of milk, its contamination with dirt at milking time and in unclean vessels, its contact with vitiated atmosphere and with unsuitable temperatures—these are the chief reasons why the produce of so many dairies is beneath its possibilities. Careless lads who need their ears boxing—and careless men, too, for the matter of that—injure a lot of milk at milking time; their hands are dirty, and they dip their fingers in the milk, thinking to milk the easier for it, and the filth drops into the pail; or they are too lazy, or too wilful, or too stupid to clean an udder that is smeared with dirt or smothered with dust before they milk the cow." Now, can any one say that our legislation is too restrictive after that? On the contrary, we might well ask for power to make regulations to compel the washing of milkers hands and cows' udders before milking. Dr. Shirley Murphy also calls attention to this matter in his paper spoken of previously, and says: "Then comes the question of the cleanliness of the cows themselves; and if nothing is done in this direction, the teats and udder become fouled with excrement, and during the milking this excrement finds its way into the milk-pail." There are in my own district dairy farms where the cows have an air space of 1,000 cubic feet per head, and where they are daily carefully cleaned, and look the picture of cleanliness. On the other hand, I have

cowsheds whose walls are made of faggots, and where the roof is a mass of filth. A few boards placed on the tiebeams form a kind of shelf for all kinds of filth, which is constantly dropping down. And such sheds it is next door to impossible to keep clean. The floor is the bare earth, or a few cobbles; and the fact that the dilapidated condition generally gives a chance of free ventilation prevents it becoming absolutely pestilential. I have known it said that by the Dairies Order we are placing restrictions on the home producer from which the foreigner is exempt. I can only say that the more such an idea is propagated, the better for the trade; and the general recognition of the fact that English milk is produced under conditions and regulations which ensure its purity is entirely a benefit to the English trade.

There are now known to be four diseases which can be propagated by the agency of milk—namely, consumption, scarlet fever, typhoid fever, and diphtheria. And with this knowledge before his eyes, the purveyor of milk in a large town, drawing his supply from the country, will look to that part of the country where this protective legislation is thoroughly carried out. And if the authorities are not alive to this, and take care that their district is thoroughly inspected and looked after, they will simply drive the trade out of it.

Mr. Barham is of opinion that a temperature of about 50 degrees is most conducive to the health of the cow; and it has been found that an increase of temperature increases the quantity of milk. But this temperature must not be increased at the expense of ventilation, or consumption is likely to be the result. In some cases cowhouses have been warmed artificially with the best results, as in this case free ventilation can be given. It appears, then, that, in the opinion of those who are competent to judge, cleanliness and fresh air are of considerable importance in cowsheds and dairies.

Now as to cubic space to be allowed, that must of course depend greatly on the means of ventilation, and in the country it may not be necessary to require so much as in the crowded parts of towns, and where the cows are kept in the sheds at all times. Regulations made by local authorities vary very much on this point. Thus the London County Council require a cubic space of 600 cubic feet per head where the ventilation is perfectly satisfactory, and 800 cubic feet per head in other cases. The Hendon Rural Sanitary Authority go somewhat further than this, and require in all cases a space of 800 cubic feet per head. Again, the Barnet Authority require 600 and 400 in the case of cowsheds in occupation at the commencement of the order. Other authorities do not state any cubic space, but simply say that the cowshed shall be adequately ventilated. This is of very little use, as it goes no further than the order itself, and leaves the cowkeeper in doubt as to what he may or may not do, and is a very half-hearted business at the best. If regulations are made at all, they should at least be definite, because what may be adequate in the opinion of one person may be inadequate in the opinion of another, and the cowkeeper may be required to do one thing to-day and something else to-morrow.

There are still many points on which I have not touched, such as water supply, drainage, provision for cleanliness of milk vessels, and prevention of infection by persons suffering from infectious disease, and of contamination from drains, etc.; but these will, I hope, be gone into in other papers. It may be interesting to mention, before I conclude, that, according to the estimate of Mr. Barham, forty-two million gallons of milk are annually consumed in London, and of this quantity the Great Western Railway carries the largest proportion, namely, some nine million gallons, and doubtless a very large portion of that comes from this county of Bucks; and the subject now before us should be of predominant interest to the Bucks County Council.

BY DR. G. DE'ATH, *Buckingham.*

The question before us now is the sanitary protection of the milk traffic, and this is not a mere matter of paving a farmyard or cleaning a bucket, but it is a question which concerns, primarily, the public. We must look to Londoners, the inhabitants of other large centres, and to all milk consumers, to take the first step in the sanitary protection of the milk traffic. What is the problem? Is it to be found in the administration of local authorities? Is it that farms are filthy and that milk is contaminated? If farms are filthy, is the milk contaminated therefrom? Is disease spread from milk, and if so, how? Is it a question of administering the dairy and milk shops order? Is that order where it is adopted always carried out satisfactorily and in accordance with the best teachings of science? Are farms which are reported to be "sanitary" by sanitary officials really free from danger? Is the report of a Medical Officer of Health on a farm always a true account and never a *suppressio veri*? Does our problem lie in any of these important enquiries, or in all of them? Certainly not. The problem lies in this question, *Do the people of this country really get what the farmers of this country produce? Do the consumers get what the producers sell?* That is the question, and the answer is, simply, that they do not. The public, ignorant and gullible, allow themselves to be cheated and defrauded by those who intervene between the producers and the consumers, and, as a consequence, the people of this country who cry out to have their health protected, who cry out for sanitary regulations with reference to farm-houses, are themselves by their stupidity diverting the legitimate profits of the farmers into the pockets of others, thereby making it impossible for the trade to pay the producers. People make it impossible for the farmer to protect the public health by means of regulations which, however advisable, however necessary, in the eyes of the public or of sanitarians, are economically impracticable, and, practically speaking, not

to be expected, because consumers—that is, the public—are so gullible, so ignorant and so stupid, that they allow themselves to consume an article which is not what it is represented to be. By this means agriculture is “sweated,” not to add to the health of the community but to fill the pockets of the London milk sellers. To give the milk traffic, as it is at present carried on, the stamp of safety which sanitary regulations would give to it, to give the public the impression that their health so far as the milk traffic is concerned is met because certain orders are “adopted,” or because a few buckets of water are used in a yard, or a few shillings expended on a cowshed, is to commit an act so base, so immoral, so hypocritical that one cannot help thinking and surely hoping that it is impossible. Bear with me, please, while I try, shortly and within the boundaries of this discussion, to show clearly what I mean. We want to secure the sanitary protection of the milk traffic. We want the public to ask for milk and to see that they get it. We want people to get pure milk—milk as it comes from the cow and not as it is, at present, supplied. We want to save people, especially children and invalids, from all possible dangers which may be conveyed in milk. The first step, then, is to get people to understand something of the article on which so much depends. Now, if there is one fallacy more than another which is deeply ingrained in the public mind, it is the fallacy that milk which is more yellow is more valuable than milk of any other colour. People are ignorant of the fact that the mere colour of dairy produce must vary, and also that colour is no test of nutritive value. The poorest skimmed milk or cheese is made to look like the richest milk or cheese by addition of colouring matter. The result of this is that much of the milk, much of the cream, much of the butter, much of the cheese, which is sold to the public, and which obtains the highest price, is, as a general rule, artificially coloured either with “anatto”—made in different forms to suit different products—or artificially coloured with a preparation of blood—a trick which

is now extensively adopted. This pandering to a popular fallacy, this “necessary” hoodwinking of the public, is mainly done, not by the farmers but by the milk sellers. People are not only cheated by the colour, but, what is more important, they do not buy the article which they think they pay for. The commercial value of milk lies in its purity and usefulness as a food. We want to protect this food. You know that cream is extracted from milk by the action of centrifugal separators. What happens to this cream-robbled milk, this skimmed milk? Here comes the question at issue. This is the point to be considered in the sanitary protection of the milk traffic. This skimmed milk is sent to London or other large towns to an enormous extent—and I am now speaking of thousands of gallons daily—and this milk is mixed with new milk in proportions which are just sufficient to keep within the law, as to the extent of butter fat in the mixture, etc. This is then sold as new milk—fresh from the farms to which you wish to give the hall mark of health. The selling of the mixture would perhaps not matter if people knew what they were buying; but my point is that *this mixture is sold as new milk* at such a price that the market value of real new milk to the farmer is proportionately reduced, and his inclinations or his means to meet sanitary requirements are thereby decreased. We want sanitary regulations at the centre first and at the circumference afterwards. We must not strain at the agricultural gnat and swallow the commercial camel. This system of mixing skimmed milk with new is so profitable to those that practise it that firms can easily afford to pay the fines which are inflicted when they are caught. It is said that one man paid £300 last year in fines, and the same old game goes on. In a sentence, whereas milk deprived of its cream is really, from a health or dietetic point of view, of almost equal value to milk plus the cream; yet the public do not know this. The cream has thus to bear the whole cost of the milk itself. It is therefore plain, in view of public ignorance, that milk deprived of its

cream is of such small money value a compared with the milk as sold by the farmer, that whenever it can be used as a substitute or as a part substitute either by colouring it artificially or mixing it with new milk, or by both, the profit is enormous. Is it at the selling centre or at the producing circumference that we should begin our sanitary protection of the milk traffic? Why not at the former? Is it right to allow people to be still further cheated by getting them to open their mouths and shut their eyes, while we tickle their ears with administrative reports as to clean farmyards and sanitary cowsheds, and while they swallow not what is produced locally but what is manufactured centrally by those "engaged in the trade"? If people want their health protected they must see that their demands are levied on all alike. Sanitation must be sensible and not senseless, statesmanlike and not spasmodic. It is the public themselves who are the fools, and it is the primary duty of sanitarians not to bolster up an easily explained apathy. Milk consumers all assist in making it impossible for farmers and landlords to meet what, if the trade was not a gigantic swindle, might be regarded as justifiable demands. I hope this conference will enquire into this matter and perhaps form a voluntary commission of enquiry into the whole question. Evidence would thus be given to the public, who could and who would then put a stop to a condition of trading which in its present state is, to use a House of Commons expression, "simply damnable."

DR. E. B. FORMAN, L.C.C.: It would be something little short of impertinent if I were to come down here from London to talk to you men of Buckinghamshire as to what you should do with your milk. I do not propose to offer any such violence to your feelings; I simply have come here at the kind invitation of your chairman to say on behalf of the County Council how much we desire to co-operate with what the Sanitary Committee of the County Council of Buckinghamshire is doing so exceedingly well. Before I come to the question in

particular I must say I can see nothing more suicidal than the attempt on the part of somebody to get rid of this Sanitary Committee. It seems to me that, in a county which requires so much to be done in the way of sanitation, and where there are so many workers, where information is needed so much and is now ready to be supplied on all hands, to take away that information and abolish the Committee would be to make a locomotive and deny the coal which is to produce its motion. I want to say a few words on the subject of milk; and I say again I should as much presume to go to the city of Newcastle to talk about coal as I should come to Aylesbury and dictate about milk. I only want to rub in if I can those remarks that have fallen from previous speakers on this subject. I suppose if we could go back some 300 or 400 years we should surprise our ancestors if they were to be shown how many thousand gallons of milk are being consumed in London alone. It is remarkable that we should take this nutritive fluid from the cow, and that we and our children should depend so much for our existence upon it when we are told by medical experts that there are at least four diseases which may be communicated through milk—viz., scarlet fever, typhoid, tuberculosis, and diphtheria. With regard to scarlet fever, that may be transmitted in two ways. I think one of the most curious cases of infection of a mountain village in Scotland was explained on the hypothesis that the boy who conveyed the milk to a particular boarding school there happened to have scarlet fever. The fever was of so mild a character that it had not been recognised, and it was only known to be scarlet fever by the discovery that his hands were peeling; and some of the skin that had peeled off the hands had managed to get into and contaminate the milk. The other way in which milk may produce scarlet fever—which was so ably demonstrated by Mr. Henry Power in the Hendon outbreak—is by a certain ulceration affecting the udders of the cow, and thus being transmitted to the human being. In these two

ways milk may produce scarlet fever; and I might run through the gamut of the other diseases and show you ways in which milk may spread diseases. I will not stop to dwell on these things: I only want to say how very much I agree with Dr. Gruggen and Dr. De'Ath as to the fact that you farmers of Buckingham are not alone concerned in this matter. You produce an article, I suppose, that is exposed to more contingencies in the way of alteration than any other article which we consume. While the butcher with his meat, the poulterer with his chicken, and the farmer with his butter can get along pretty well, you have here a fluid which may absorb from the atmosphere something which may convey death to the consumer. You are handicapped in such a way and are made responsible when it is not right that responsibility should be cast upon you alone. You have to produce this changeable thing, and then, when you have produced it, you have to send it to London to be sold, and I know perfectly well the truth of all that has fallen from Dr. De'Ath as to what may happen to it then. I happen to be a member of the Public Health Committee, and I was occupied on Monday with other members of the committee in granting licenses to dairymen, and in trying our best to regulate the cowsheds of London. I can assure you we have at heart all that Dr. De'Ath has said, and we are doing all we can to get rid of cowsheds in London. We are trying as best we can to get the milk traffic out of the hands of the lower class of milkmen in whose hands it now is. We are trying with our Dairy Shops Orders, which we have posted up in every available place, to improve the sale of this article. For the most part these things are educational at present, but we hope in the near future to be able to exercise some primitive effect upon the sellers of milk who sell an adulterated article. I know well all that has fallen from the last speaker (Dr. De'Ath) is perfectly true, that milk is frequently sent up pure from your dairies to the shops of the people who vend it, and it is there that it is

adulterated. Milk sometimes does harm, moreover, when it is not consciously adulterated. In an epidemic of fever in South London which was investigated by our medical officers some years ago, we found that the typhoid was traceable entirely to persons who had eaten ice creams. These ice creams were made with milk, but it was not the milk which was at fault in this instance—it was the chamber in which the ice creams were prepared, although the milk got the credit of it for some time. The room adjoining the shop was in such a state that it is almost inconceivable that anybody at all, even the poor people of South London, would have bought these ices from the man's stall had they been aware of the very dirty condition of the room in which these things were prepared. I say we are wishful in London to co-operate with you gentlemen in Buckinghamshire to the best of our ability. We only want you to see the vital importance of the subject in hand (hear, hear); we want you to see Aylesbury has the greatest name as a milk-producing place in the world. I know a family of English extraction who live in Lyons, who, because the milk is so bad there, send all the way to Aylesbury to get their nutritive fluid for their baby. I want you to see that there is another side besides the health side of this question—that is, the economic side, which has already been touched upon with so much ability; the side which shows that the trade of this great country is going away from us. Well, when we see, as I do as a consumer of butter, the great emporiums there are in London selling “Brittany,” or, as we call it in London, “Normandy,” butter at a penny a pound dearer than “Aylesbury” we cannot but feel that there is something rotten, not in the state of Denmark, but in that of Aylesbury (hear, hear); and I trust you men who have opportunities of devoting yourselves somewhat to the question of political economy will see a right way out of this, and will see some means of placing yourselves in a better position than the men of Denmark or of Brittany, or Normandy, or wherever it

happens to be where this large increase in the export of butter which the chairman has mentioned has taken place—viz., an increase of from 19,000,000 lbs. to 99,000,000 lbs. in ten years. (Hear, hear.) Surely you do not want the great butter trade to go away from Bucks, and be taken either to Denmark or France. But, I think, after all said and done, that when we throw all the blame we can throw on the people of London—I mean on the dairy shop-keepers—that there may be something due to you, some want of foresight, some carelessness in the great object you have in view, some dislike to look at the main chance, some want of energy or enterprise; and I do earnestly beseech you to look at this matter all round to see the exceedingly good position in which the Londoner is placed, to notice how much he has the choice of things from these different countries. (Hear, hear.) Are you going to allow this great trade to pass away from this Vale of Aylesbury? Are you going to allow Mr. Nestle, or rather his successor now, for he has lately died, to make the enormous fortunes in the future that he and others have made in the past? Besides being a member of the Public Health Committee, I am also Chairman of the Hanwell Asylum, and it is with great concern that we are constantly noticing how poor the milk is. I am aware condensed milk is produced in England as well as in Switzerland, and it is therefore to some extent an English product; but ought we gentlemen to have to go away from our own native land and buy milk from Switzerland? Ought we as economists, when agriculture is failing as it is, to go to Switzerland to purchase milk when our farmers are languishing in the way that has been so ably described to-day? (Cheers.) I offer these observations in all humility, and I hope you will consider I came down to listen and to learn, and not to criticise, and certainly not to scold. (Cheers.)

MR. ALDERMAN PERKINS: I must express the great pleasure I have felt in listening to the very able paper read by Dr. De'Ath. It seems to me to be in the right place

at the right time, and I am very glad some members of the County Council have had the opportunity of listening to it. It is certain if the County Council will co-operate in preventing the adulteration of foreign butter which is imported and the adulteration of milk by separating the cream, a great work will be accomplished in the interest not only of the producer, but in the interest of the consumers of dairy produce. (Cheers.)

DR. J. C. THRESH: I find that two or three gentlemen who have spoken have drifted on to the question not so much of the sanitary protection of the milk traffic as of the detection of adulteration. I should like to say with reference to this, that at a Congress held recently in London the subject was considered not only by the medical officers of health, but also by analysts, and it was found that there were very great difficulties in the way of proving what is pure milk and what is not. There is also with regard to milk and butter, a difficulty with the magistrates. They seem to consider that the sanitary authorities are acting more as plaintiffs in civil actions than as guardians of the public health, and consequently it is exceedingly difficult to get convictions. (Hear, hear.) While that is the case I am afraid very little improvement will take place. What the Conference suggested was that a committee should be formed. A committee was formed, and they are drafting a number of alterations in the Sanitary Acts, and also in the Sale of Foods and Drugs Act, which will enable these adulterators to be punished more severely; and in that way the handicapping which has taken place up to now through foreign competition will in a measure be done away with. (Cheers.) I should like to point out also in connection with the sanitary protection of the milk trade that there is very little indeed being done. It does not follow because a sanitary authority has adopted these model bye-laws that they have done anything at all. I am afraid that in many districts they have simply adopted them for the sake of making bye-laws. The Medical Officers' Report states

that during the year they have adopted these bye-laws, and it goes forth to the public, and the sanitary authority gets the credit of having done something. But what is the use of adopting them unless they are enforced? As soon as the medical officer of health tries to enforce them he finds the difficulty, and at the end of the year, after he has been trying his best conscientiously to enforce the bye-laws, he sees that nothing has been done, and he gives up the whole thing in disgust. A short time ago I communicated with medical officers throughout the country, men in whom I have the greatest confidence, and I found in almost every case, although in the first instance they had begun enthusiastically, hoping to do a great deal, that practically nothing had been done. I am not in a position just now to offer any suggestions as to how the thing can be improved. It does not rest with the medical officers nor with the sanitary inspector: it rests, I am afraid, in a great measure with the sanitary authorities, with the magistrates and with the owners of the farms. Everything is in such a depressed condition now that the owners make that an excuse for doing nothing, and the sanitary authorities make it an excuse for not putting pressure on the owners. The result is we have these Acts and bye-laws and nothing coming of them. (Hear, hear.)

MR. HATTERSLEY (Managing Director of the Aylesbury Dairy Company): Representing as I do, I think, the oldest dairy company in England, it has given me great pleasure to be able to avail myself of the opportunity so kindly extended to me by the Chairman to come to this Conference and hear the very interesting papers which have been read with regard to milk. The remarks made by Dr. De'Ath are so wide and so able that I do not think it is necessary to say very much on the subject. I will take the sanitary point first, and in regard to that I may explain that we never take any milk from a farm which has not been first inspected by the Medical Officer of Health for the district, and the water of which has not been analysed by our own

analyst. To show you that this is necessary I may say that, before coming down here this morning, I found that out of 130 samples which have been forwarded to us for analysis 46 were condemned as polluted, and the farmers in these cases had either to find better sources of supply, or we did not take the milk from the farms. I think, therefore, there should either be a change in the law, or a change in the administration of the law, in this respect, so as to ensure all dairies being furnished with a good supply of pure water. But with regard to this we cannot get on unless the farmer and the Medical Officer of Health co-operate with us, and I should like to bear public testimony now to the care and attention with which the Medical Officers of Health with whom we come in contact deal with the farms which are placed under their charge by us and from which we receive milk. Going from the sanitary question to the question of adulteration, I think Dr. De'Ath in his very able paper hit the right nail on the head. (Hear, hear.) There is no doubt the farmer would get a higher price for his milk if it were not for the fact that separated milk is largely mixed with the pure milk in London; and if means can be devised whereby this mixing of separated milk can be put a stop to, I am sure the result will be greatly beneficial, not only to the farmer, but to the honest dairyman in London, and to the public at large. (Hear, hear.) The percentage of fat in the milk that we receive would bear an admixture of separated milk to so large an extent as would make us something like £8,000 a year extra profit, and still not come below the present recognized limit. I sent some figures to the Adulteration Committee which was sitting at the House of Commons recently, and if I may be allowed I should like to read them, as they may be interesting:

"It has come to the knowledge of the Directors of the Aylesbury Dairy Company, Limited, that certain persons interested in the dealing in milk, have drafted a Bill for the amendment of the 'Sale of Food and Drugs Act,' in which they seek to fix a standard of 2·5 per cent. of fat

and 8·5 per cent. of solids not fat as the legal standard for pure milk. The records of analyses made in the laboratory of the Aylesbury Dairy Company have been searched with a view of discovering a justification for such a proceeding. These records since the year 1881 contain a total number of 248,484 analyses of milk, of which 154,815 have been of milk as received from the producers, that is the milk of a number of cows mixed together, or 'mixed' milk, 6,462 of milk of single cows, and the remainder of samples of milk taken before, during, and after delivery to the Company's customers in London. The average monthly composition of milk for the past thirteen years and six months is given in Table I., from which it will be seen that the quality has been such that the milk would have borne an addition of nearly two-thirds of its bulk of separated milk, *i.e.*, milk from which the cream has been extracted by means of a centrifugal cream separator, without bringing the percentage of fat below the standard of 2·5 per cent. now proposed, or in other words an average adulteration of 60 per cent. (60 gallons of separated milk to 100 gallons of whole milk) would be legalised by the passing into law of the Draft Bill. It is argued that, though the average quality of 'mixed' milk is such as given in Table I., the variations of milk from individual cows are large, some milk being well above the average and other falling markedly below, and that therefore a low standard must be fixed; the standard of 2·5 has on this account been arbitrarily chosen. On this point the Aylesbury Dairy Company can offer the evidence of 6,462 analyses of milk from individual cows of different breeds (Table II.), probably the most complete series extant, and certainly far larger than any hitherto published. In this it is seen that the amount of fat in milk of single cows varies between 10·5 and 1·1; it follows, therefore, that a standard of 2·5 per cent. would not always cover the lowest quality milk yielded by a cow. In Table III. are given the highest and lowest percentages of fat in the milk delivered to the Aylesbury Dairy Company's customers on each day from the 1st of January, 1890, to the 30th of June, 1894; a study of this will reveal the fact that not only has no milk been delivered with less than 3·0 per cent. of fat, but that in certain months of the year (autumn and winter) this figure has never been touched, indicating that commercially not only is there no real justification for a lower standard than 3·0, but that it should be raised in the autumn and winter. It has also been pleaded that a low standard is necessary

in order to prevent innocent milk vendors from being convicted on account of circumstances beyond their control, *i.e.*, the rising of cream by natural force in the milk during delivery, and in hot weather its churning into butter: about 10,000 experiments have convinced the Aylesbury Dairy Company that under ordinary circumstances and in ordinary seasons there is no great difficulty in delivering milk of ordinary average quality, so that every portion to the last drop shall contain the same amount of fat to 0·1 per cent., even in the hottest weather. Moreover, it is submitted that it is not necessary to take this into consideration in fixing a standard, as every such case, should it be proved to occur, would be considered on its merits by the magistrate. The Directors of the Aylesbury Dairy Company would therefore submit that a standard of 2·5 per cent. of fat would be a legal farce, and would permit of flagrant adulteration; and that seeing there are natural variations in quality from month to month, it would be unwise to fix any standard which might, in the interests of justice, require either to be lowered or raised according to circumstances; a standard fixed by Act of Parliament could not be so altered. The standard for solids not fat proposed in the Draft Bill, 8·5 per cent. is the same as the limit now adopted by the Society of Public Analysts, and there seems to be little dispute as to its being reasonable. In one respect, however, it might cause manifest injustice; it is well known that when cream is in excess in a milk that the solids not fat are thereby depressed; indeed, in cream itself there is only about half the percentage of solids not fat that occurs naturally in milk; cases have occurred that very rich milk has been sold in which the solids not fat have been below 8·5 per cent., solely on account of the presence of a large percentage of cream, and were a legal standard of 8·5 per cent. to be fixed, milk of great richness would be inevitably condemned, and could not be sold; it is true that by the addition of separated milk (which contains larger quantities of solids not fat than milk) the quality of such milk could be brought above the legal standard; but the ostensible object of the Draft Bill is not the legalising of such addition, and in this case the fixing of a standard of 2·5 per cent. of fat would also favour instead of prevent adulteration. Take for instance as an example—average pure milk taken from a number of cows and 'mixed' together, contains, say, 3·9 per cent. of fat, and 8·8 per cent. of solids not fat; separated milk contains 0·25 per cent. of fat, and 9·2 per cent.

of solids not fat ; cream contains, say, 50 per cent. of fat, and 4·7 per cent. of solids not fat. Now by taking—

	Fat.	Solids	not Fat.
10 parts of pure 'mixed' milk	39·0	...	88·0
6 parts of separated milk	...	1·5	...
	---	---	---
we get 16 parts of milk which would pass the proposed standard 16)	40·5	...	143·2
	---	---	---
Containing ...	2·53%	...	8·95%

Showing that an addition of 60 per cent. of separated milk to 'mixed' milk would masquerade as 'genuine,' were the proposed limit adopted. Again—

	Fat.	Solids	not Fat.
10 parts of 'mixed' milk	...	39·0	...
1 part of cream	...	50·0	...
	---	---	---
we get 11 parts of rich milk 11)	89·0	...	92·7
	---	---	---
Containing ...	8·09%	...	8·43%

A very rich milk, which would fail to pass the standard. To take the case of milk somewhat low in solids not fat, but which has been shown over and over again to exist, say—

Fat 4·50, and solids not fat 8·40,

this would not pass the standard. Add to two parts of this milk one part of separated milk—

	Fat.	Solids	not Fat.
2 parts of pure milk	...	9·0	...
1 part of separated milk	...	0·25	...
	---	---	---
3 parts mixture	3)	9·25	...
	---	---	---
Containing ...	3·08%	...	8·67%

which would pass the standards as perfectly genuine milk. The Directors of the Aylesbury Dairy Company submit, therefore, that it is undesirable that a 'standard' should be fixed by Act of Parliament, or if it is decided by the Committee of the House of Commons that a standard should be fixed, that it be not less but rather higher than that now adopted by the Society of Public Analysts, and most certainly the method of analysis should be specified. The public, the farmer, and the honest retailer suffer much more damage from the addition of 'skim' or 'separated' milk to the pure article, than they are at all likely to suffer from a high standard." (Cheers.)

I should like to mention, with regard to a statement made by Dr. Foreman as to the milk supplied to the Hanwell Asylum, that I have frequently tendered for milk, but I

could not get an order because I found that the price given for milk by institutions of the kind is generally below that which we pay our farmers. (Laughter.)

REV. G. HARFORD BATTERSBY: At the risk of seeming impertinent in speaking at a Conference attended by experts, I should like to make a few remarks. With regard to the sanitary protection of milk on the spot where it is produced, a great deal depends on the voluntary co-operation of the farmer and the labourer. Of course if the farmer is spoken to about the sanitary condition under which he produces his milk, he turns to the landlord and says that if he had pattern buildings he might do something. But without waiting for these buildings, I think we might do something by getting the farmers and labourers to meet together and confer, perhaps with a sanitary expert, to make practical regulations for cleanliness. Such things as keeping the hands clean when milking would be better attended to if men were appealed to on grounds of humanity, and for reasons which appeal to everybody. (Hear, hear.) The first suggestion I would make then is that the Sanitary Committee should encourage the holding of a small conference in every village, to provide for the sanitary protection of milk on the spot. The second suggestion is one I am induced to make by a remark which fell from our Chairman. Some time ago, in thinking about this matter, it occurred to me that it might be a solution of the milk difficulty if milk could be sold by quality and not by quantity, instead of requiring that the milk should not be sold unless it reached a certain standard. Apparently some such system is carried on in Denmark. In some parts of London fivepence a quart is paid for milk, and in other parts fourpence. I cannot see why there should not be fivepenny, fourpenny, and threepenny milk ; only let the quality correspond to the price. If the milk is worth fivepence, let fivepence be the price for it ; but if it does not come up to such a good quality, then the price should be reduced to fourpence. In that way you would prevent the mixing of separated milk because that would lower

the price, and the richer the milk, the greater would be the profit, or else an opening would be left for an honest trade in separated milk to mix with whole milk to produce a nourishing milk at a cheap rate.

MR. KNIGHT BRUCE: I should like to say a few words with regard to this adulteration of milk. I do not suppose that gentlemen from London would like me to dictate to them; but I would like to suggest that it would be a wise thing to send inspectors down in the country to our large milk factors and follow up the cans, and see where the adulteration comes in. The gentleman who last spoke evidently has not been in the milk trade, for he spoke of threepenny milk. If he bought the article at that price it was not milk. No milk could be sold in London for 3*d.*, and it could hardly be sold for 4*d.* The public, however, will have a cheap article, and they must expect to get what they do get. I do think, however, something could be done by following these milk cans up to London, and watching a few large concerns. I do think it is advisable that the Act of 1894 should be carried out, and that the sanitary officer should make a point of visiting all the farms in the district, and notifying any place which he considers is not so sanitary as it should be.

DR. FORMAN; It is *ultra vires* to go outside the county and inspect the milk of any person.

MR. KNIGHT BRUCE: You can go to Paddington and Euston, and trace it there.

DR. M. M. HAILEY (M.O.H. Newport Pagnell): So much has been said about this milk traffic that I need say but very little; but there is one aspect that has not been noticed—that is, from time to time I, in common with other medical

officers of health for Buckinghamshire, am asked by milk venders in London to go and examine dairy farms and make a report to them in the form of a certificate, and I believe they sometimes use these certificates in the form of advertisements. That is always an unpleasant thing to do, because I think one finds that if you take the standard laid down in this order, not many of our dairy farms come up to that. I have generally found that the dairy farms do not come up to the standard suggested in this order—you do not find the buildings clean or the flooring clean, the drainage is not as it ought to be, and there is not a good water supply. The water seems to be the chief thing. Over and over again, when I have been asked to give a certificate, I have said, “I do not think the water is good; will you have it analysed?” It goes to an analyst, and the result often is that it is unfit. I have not been able to give a certificate more than once because of this, and in several cases the contract has been taken away because of the bad water. The farmer perhaps has some discussion with his landlord in order to get a new water supply, and in the meantime the contract is taken away. I cannot help thinking that if all the farms came up to the standard of the order, more milk would be bought, and less condensed milk used. I was told the other day by a representative of a Condensed Milk Company that one million pounds’ worth of condensed milk is imported into this country every year. I think the enormous quantity of condensed milk used must show that there is a distrust on the part of the public with regard to the milk supply. That feeling, I believe, would be taken away if this order were enforced. (Hear, hear.)

HOUSING OF THE WORKING CLASSES ACT, 1890 (53 & 54 Vict., cap. 70).

BY DR. C. HOOPER, *Aylesbury*.

The first part of this Act deals with unhealthy areas. After various definitions and references, clause 4 embodies the substance of the Act, and gives ample power to the local authority to act, on an official representation being made to them of the necessity of so doing. The definitions are full as to the various sanitary defects that can be dealt with in any houses, courts, or alleys, rendering them unfit for human habitation or dangerous to the health of the inhabitants either of the buildings in the said area or of neighbouring buildings; and that the evils connected with such cannot be remedied by other improvement scheme renders it imperative on the authority to proceed to make a scheme for the improvement of such area.

Sect. 5. (1) *An official representation* shall mean a representation made to the local authority by the medical officer of that authority. (2) A medical officer of health shall make such representation whenever he shall see cause; and if two or more justices of the peace within his district or 12 or more persons rated to local rate complain to him of the unhealthiness of any area, he is bound to inspect and make official representation whether in his opinion it is an unhealthy area or not.

Section 6 gives directions as to the requisites of the improvement scheme to contain maps, particulars, and estimates. I will not follow this part of the Act further. It goes on to provide for confirmation of scheme and routine to be observed in preparation, presentation of petition to the Local Government Board praying for an order confirming such scheme, and for costs, charges, and expenses incurred in relation thereto. It appears a provisional order shall not have validity unless confirmed by Act of Parliament 9 — opposition to the confirming of a provisional order is referred to a committee of either House of Parliament, and costs awarded as committee think just. This

part of the Act has been carried out in large towns, but it is hardly applicable to small ones on account of the great costs involved. I shall therefore pass on to Part II., *Unhealthy dwelling houses*.

Section 29 contains definitions of terms merely.

Buildings unfit for human habitation. 30 makes it the duty of medical officer of health of every district to represent to the local authority of that district any dwelling house which appears to him to be in a state so dangerous or injurious to health as to be unfit for human habitation.

31 (1) empowers four or more householders living in or near any street to complain in writing to medical officer of health of premises in their opinion in the above condition, and he is bound to inspect the same and transmit the complaint to his authority with his opinion thereon. (2) If no action is taken by the local authority after receiving the complaint and opinion or representation of medical officer, the householders who signed complaint can petition the Local Government Board for inquiry, and the said Board, after causing inquiry to be held, may order the local authority to proceed under this Act, and such order shall be binding on authority.

Closing order and demolition. 32 makes it the duty of every local authority to cause inspection of their district to be made from time to time to ascertain whether any dwelling house therein is in a state so dangerous or injurious to health as to be unfit for human habitation; and if, on the representation of medical officer, or of any officer of such authority, or information given, any dwelling house appears to them to be in such state, to take proceedings against owner or occupier for closing the same. Then follow directions as to proceedings for causing dwelling house to be closed; and—

33. Where a closing order has been made and improvements not carried out to satisfaction of authority, they shall pass a resolution that it is expedient to order the

demolition of the building. Instructions for proceedings follow.

34 provides that, if the owner fails to carry out the order to demolish building within three months, the local authority can do so, sell material, and pay balance after paying expenses to owner.

35 gives power to aggrieved person to appeal to Court of Quarter Sessions against an order of local authority.

36 enables owner to apply for charging order, making the expenses incurred a charge on property, money being advanced at 6 per cent. for 30 years.

Obstructive Buildings. 38 (1) A medical officer of health, if he finds a building, although not in itself unfit for human habitation, by its proximity or contact with other buildings stops ventilation or conduces to make other buildings unfit for human habitation, etc., or prevents proper measures being carried out to remedy such defect in other buildings, shall represent to the local authority the particulars relating to such obstructive building, stating that in his opinion it should be pulled down. (2) Four householders may make a representation to the same effect. (3) The local authority shall cause a report to be made and take action accordingly. (4) Empowers local authority to purchase the lands on which such buildings stood. (5) Provides that an owner may retain the site, and receive compensation for the pulling down of obstructive buildings. Compensation and arbitration clauses follow.

39. *Scheme for Reconstruction.*—This seems to apply to the local authority, and does not concern the medical officer, although it has been through his initiative in condemning unhealthy areas and houses that it becomes necessary. It deals with the consideration of how the area of a demolished dwelling shall be dealt with—whether dedicated as a highway or open space, appropriated, sold, or let for the erection of dwellings for working classes, or exchanged for other land more suitable for such dwelling.

41. Settlement of compensation.

42. Expenses and borrowing are all matters which do not concern the medical officer.

45 gives the County Council power to act where a local authority has failed to do so.

Supplemental. 52 gives a representation from medical officer of health of any county to the County Council, and submitted by them to local authority, a like effect as a representation of medical officer of the district.

I have endeavoured to summarise this Act as far as regards the duties of the medical officer. He has to take the initiative in setting the Act in motion, but in the subsequent proceedings, after his representation and opinion have been submitted to the authority, he has nothing to do with the details of carrying out the scheme which he has submitted. I have, therefore, not followed out the various modes of procedure, which are fully given in the case of opposed or unopposed proceedings. We have ample powers under the Acts to improve the dwellings of the working classes, and it is very desirable that it should be done; but upon whom is the expense of doing so to fall? The rent of the cottages built according to modern requirements and the bye-laws is little short of four shillings a week, and this is beyond the means of widows, those in receipt of parish relief, and others who now pay from fourteenpence upwards per week. Money cannot be spent on these properties to bring them up to what they ought to be without raising rents. Some improvements may be effected gradually as repairs become necessary, such as new floors and additions to accommodations; but I do not think we should attempt to get closing orders or demolition except in extreme cases, but endeavour to work upon owners to gradually improve their properties; and if this cannot be done to the satisfaction of the authority, it seems only fair that the property should be purchased, and the improvements which are for the good of the public at large should be borne by them, not saddled on the unfortunate owner of such unsatisfactory property.

In some cases in our town demolition would mean confiscation, for no new houses could be placed on the ground on account of there being no space at the back. I should like to see a block of tenements erected, where,

for a moderate rent, accommodation could be provided, in sets of one, two, or three rooms, with a common kitchen, washhouse etc., in which a childless widow or old couple could be provided with suitable accommodation, and a small family could find better conveniences than one of our old cottages affords. I do not think this is likely to be undertaken unless as a private speculation. The Working Class Lodging Houses Act would apparently enable, if adopted by the urban authority, such tenements to be provided.

I have had drawn out a table showing the sanitary defects noticed in a late inspection of 102 houses in different parts of the town selected as the worst class of tenements, all old buildings, including for the most part courts, alleys, and yards just out of main streets, and, I should say, representing about one half of this class of property in the town. It appears that no damp-proof course exists in any of these tenements; no ventilation under floors in 89, bricks or boards being laid on earth without concrete; 19 external walls $4\frac{1}{2}$ -in. thick, insufficient to keep out inclement weather; 89 no fireplace in bedrooms; 60 no separate washhouse; 36 insufficient height and size of rooms; 55 insufficient air, light, and ventilation; some, from being back to back, no through draught can be had; 17 insufficient privy accommodation; 74 drains not trapped off main or ventilated; 45 water-taps over boarded floors; 102 no flushing apparatus in privies.

These houses are occupied by 350 people, about $3\frac{1}{2}$ to house; they are generally low rented, and the inhabitants, though poor, respectable—widows, old people, those in receipt of parish relief—and are generally decently clean; and the inhabitants think themselves fortunate in being able to get a cheap house. There are a few occupied by a class who are thriftless, dirty, destructive, and these are apt to be also over-crowded; they are moved on from one locality to another, and often from bad to worse; they are not fit to inhabit a respectable house, and owners of such won't accept them as tenants; they must have some shelter; not being paupers, they cannot be driven to the

workhouse. And I think we must be content to see that their dwellings are weather-tight, kept well whitewashed, and not over-crowded; for they would soon reduce a good cottage to the condition of an old one, and derive no benefit from better accommodation. The most wretched tenement in the town has been occupied 50 years by the present tenant, a sweep, who now ostensibly lives by himself. It will be condemned when the poor man dies; it would be hard to turn him out; he thinks it is good enough for him, and so perhaps it is.

There is one great thing: all these tenements have Chiltern Hills water; though an enlightened body, like the directors of this company (which has been a great boon to the town and neighbourhood), insist upon the taps not being placed over sinks, and so keep the floors and walls damp from the dripping of the taps, which often cause the boards to rot. They (the directors) also demand ten shillings for each flushing apparatus to closets. I think they exceed their powers in both these cases. They are bound to supply one closet; whether hand-flushed or through a cistern should make no difference. These conveniences (closets) are often placed in barns which serve as washhouse as well, and are dark, often insufficiently flushed. They ought to be made separate places.

Some years ago, when making a visit of inspection in an old cottage without any curtilage, I was at a loss to find the W.C.; but observing that one of the stairs seemed loose, I removed the board, and found that it covered the pan—a common syphon trap. The staircase was open to the only bedroom. In another case I found the closet under the stairs, and opening into the sitting-room. These tenements were closed by the landlords voluntarily on having notice from the inspector.

It is noticeable how many old houses have no fireplace. But the flue is not valued by the tenants as a means of ventilation, for they generally close them to prevent draft when no fire is burning. But it is often a serious matter in cases of illness in severe

weather to have no means of warming save the oil stove to foul the air still more. Height and size of rooms and the number of inhabitants must be regulated accordingly. We cannot enlarge. Air, light, and ventilation may in some cases be improved. Trapping and ventilating of drains can be enforced.

I must apologise for the imperfections of this my endeavour to fulfil the promise I gave to Mr. Verney to supplement Mr. De'Ath's paper on this subject with a few remarks, and to give the result of my inspections (being those carried out under instructions from my Board) as to the dwellings of the working classes which might be unfit for human habitation. I have, unfortunately, not been able to complete my report on which this communication was to be based, and I have found it a very difficult matter even so inadequately to fulfil my promise owing to professional work having for the last few weeks been very pressing. Asking your kind consideration, I shall be satisfied if my poor endeavours elicit an expression of opinions from others as to the best way of carrying out the object of the Act.

BY DR. G. DE'ATH, *Buckingham.*

In the paper which it will be my privilege to read to you to-day I shall follow out the line of argument which I adopted in the article entitled "Rural Sanitation and the Public Health," which I wrote for the first number of the *Medical Magazine* in July 1892, in the paper which I read before the Sanitary Congress at Portsmouth, and in the paper which I read at the last Bucks Sanitary Conference which was held under the chairmanship of Mr. F. Verney.

I beg those who are going to do me the kindness of listening to this paper, and especially those who take part in the discussion, to look at the question frankly and fully, and not take little bits or sentences out of this paper and hang thereon the inane expressions of specious prejudices, or those shallow sophistries which may sparkle and yet are senseless. The question of the housing of the working classes is of world-

wide extent; and yet it is a national and local, an urban and rural, a collective and individual, question. It is a political problem because it affects the homes and the health of the members of the State. We do but delay the just solution of a political problem when we make it or allow it to become a party matter. If in the plan by which, I humbly submit, this problem can be solved, or in my remarks, any questions are discussed which savour either of some old-fashioned, or new-fangled, set of principles nicknamed by some term of indefinite meaning, I beg to state at once that it is no part of my work to discuss this question otherwise than on its merits, and I also beg to be excused from being called, or having any plan which I argue to you being called, by any party nickname, whether it be Tory or Whig, Radical or Liberal, Conservative or Socialist. The only term which might apply to what I want to discuss would be the term "Collectivist." I mention this for the convenience of those who treat arguments by manufacturing labels. In all problems of this kind it is well to see how far we are all agreed without going into structural details; and I am now going to begin to deal with the subject of the paper. Every one will admit that every person should have a habitation which is of sufficient size, and have around it a sufficient air space, to meet the proved requirements of physical, mental, and moral health. Once more, we must all agree as to the method by which an alteration should be brought about. Now, I submit that every revolution is not a reform; but if I make that large admission it will only be to gain your assent to the statement that every reform is not a revolution. Even a revolution may not only be peaceful, but may be justifiable and necessary if such a change of civilised conditions as a revolution is necessary and unavoidable to remove an evil or an injustice, which is dangerous to the individual or to the nation. If the evil is extensive, then the remedy must be one which will affect a similarly large area. If the Housing of the Working Classes is bad all over England, then the remedies which

are local and partial will be but useless tinkering. I state that the evil is extensive, and I pity the person who contradicts that remark. Let such an one go to the poorest parts of this town, or any other in the country we profess such love for, or let him go to any of the villages in North Bucks, with very few exceptions, and let him use his eyes. It is a useless waste of time to argue the fact that the evil is extensive. I am not here to suggest any little-by-little plan, any we-must-go-with-the-times scheme, any half-a-loaf-is-better-than-no-bread sort of policy—all that sort of thing is practically a waste of time, except on election platforms, or except in so far as such tricks stifle the discontent which, when voiced, produces reform.

The great obstacle in the way of a settlement of this awful evil is to be found in the fact that the makers and the administrators of the law only act not after listening to their own sense of right, but after straining every nerve to catch the grumbings, the voice of the people. We want men and women to deal with this matter who will voice, by legislative enactments and administrative acts, the silent but necessary requirements of the nation. What is right and what is just should be asked for, whether public opinion "grows" or not, or whether the times are ripe or not. I submit, then, that the evil is grave, and removal of it is a great matter. The remedy must be applied, whether it is asked for or not, or whether it upsets, slightly, existing arrangements in the form of reform, or upsets, violently, existing conditions in the shape of a revolution. The future man, the patriot of the future, will be the man who leads public opinion, and not the man who only follows it. Every person must, in this climate, live in some habitation. It is best for the individual and for the race, for the citizen as for the State, that that habitation should be as good as possible, and not, mark you, only as good as present social conditions admit of. But every house must be built somewhere, and as it cannot be a castle in the air, it must be a home on the land. The first essential fact to grasp in dealing

with this problem is that land must be used; and this should be compared with another fact, the essential factor in the evil, that land is here, there, and everywhere; but so far it has not paid those who own the land to grow more than a limited number of human beings, and even those have had to live on the smallest possible quantity of that commodity which is absolutely necessary to every life—namely, land. Land is as essential to life as air. This cannot be denied, or if it is denied it cannot be disproved. Now let us get into even closer quarters with the subject. The substitution of new homes for old ones is theoretically advisable and, rationally speaking, just. Can we not all agree here? If not, we shall surely assent to the view that houses which are distinctly bad should no longer be used as homes. Now, whose duty is it to provide such house accommodation as the community requires? Like many other great social problems this is best considered and seen in all its aspects, not in crowded areas where complexities arise, such as in London or Liverpool, but in small rural towns or in the villages. The housing of the poor is not bad everywhere, but it is only good in very few places. If you take one aspect of the question it is to see how futile any partial remedy would be. For instance, it might be argued that workers on estates should have houses provided for them by the owners of such estates, the expenses being regarded as part of the outgoing expenses of the estates in the same way that sties, cowsheds, and stables are provided in the interests of the health of pigs, cattle, and horses. This might be thought to be a proper solution of one part of the matter; but then we know, only too well, that there is no power to get this done, owing to the condition of the pockets of some and the consciences of others. This is an incomplete as it is an insufficient solution, so indeed are all plans which do not, as a primary principle, abolish the principle of the private ownership of land. This must be true, as the community cannot have houses without land to build on, and, therefore, in this matter, the community must either control the land or be controlled by those who

can control that without which the community cannot live. No one of authority in Europe, or rather no one who is likely to influence thought, has proposed that could or should be done without adequate compensation to those who now hold land. To return, the people in every parish must live somewhere, and if the land of the parish belonged to the parish authority, or the land of the district to the district authority, or the land of the county to the county authority, then it would be possible for the local authority to let land either for agricultural, or building, or any other purpose. The authority would have no other motive, and could in the nature of things have no other motive, than to supply the local demands. The scheme to which Mr. Chamberlain alluded at Birmingham on October 11th, this year, and known as the House Purchase Scheme, proves to demonstration that it would pay local authorities to erect dwellings and let occupiers buy the holdings—not the land—on easy terms. We know how houses should be erected, for have we not the Model by-laws to guide us? This is no cry from the Have-nots. It is plainly a land question. People do not want to take other persons' property. You will never get, in modern times, any large section of the community to ask for, and still less to work for, any change which is based on injustice, though for many a long day to come we shall see sections of the community try and protect unjust systems. It is said that the idea I have spoken of is "Robbery." That is just one of those very common and convenient common-places by which the consciences of the comfortable and the conventional are constantly consoled. It may suit some to nickname proposals. If local authorities can, fairly and justly, acquire the land for housing all, including the poor, it will then, and not till then, be the fault of the community if all are not properly housed.

MR. LEON: I attended the Conference held last year at the Paddington Hotel, and gained a good deal of instruction from it. I have attended here to-day, and I am sure

we have gained a good deal of instruction from what we have heard to-day. We have had the different diseases diagnosed by the different speakers, but we have had no practical remedy offered to us. We have derived a great deal of education from what we have heard, but when we boil it down, when we come to focus what we have heard, when we come to put it into practical effect, it will require somebody to pay the money and to find means for carrying out the suggestions. Who is to pay the money for all these new sanitary arrangements, for the better housing of the working classes, for the superior accommodation of cattle, and so forth? All this will require large expense and extra rating. No one has ventured to tackle that question to-day. Mr. Dell cried piteously, and with some amount of reason, on behalf of the farmer, Why should a tenant farmer put permanent improvements up when he has only a tenancy for a year? It is a very large question, and it opens up the incidence of local taxation, and taxation generally. I am afraid what I am going to say may not find favour in all your minds, but it is no good mincing the question. Ultimately these different expenses for all these local improvements will have to come out of the pockets of the landlords, and of the landlords only. If the country is sufficiently educated to demand these improvements—as they ought to demand them—they will go to improve the land and the property of individuals, and it is to those individuals that we must look to bear the burden of the price to be paid. I think if anything justifies this Conference we are holding to-day, which has been so well presided over by Mr. Verney (cheers), it will be that these speeches shall be pushed home, and that the education of the farming interest must be on this one point, that it is not the tenant farmers who will have to pay out of their pockets, but that the rates which have to be found for these permanent improvements must come ultimately, solely, and wholly from the landlords. (Cheers.)

DR. J. C. THRESH: I regret that in all these speeches matters are looked at so

much from pounds, shillings, and pence point of view, more especially as our excellent friend, Sir Thomas Crawford, deprecated that view of the subject, and said that although we might be expending a pound we were probably saving ten. I am bound to say that any one who reads the reports of the Medical Officers of Health, and who sees the small number of houses that have been condemned, might jump to the conclusion that the Act was almost inoperative, and that very little had been done under it. As a matter of fact, I believe very little has been done legally, that is, by taking legal proceedings; but indirectly it has been of great assistance without our having had to take action. We have been enabled without taking proceedings to get many houses into fairly decent order. It is with this Act of Parliament as with many others, the force behind you enables you to get an enormous amount of work done without resorting to that force. The Medical Officers of Health throughout the county have indeed very faithfully carried it out. They have inspected their districts as required by the Act; they have reported to the Authorities, and they are not responsible for the little progress made. One section of the Act enables the local bodies to erect cottages for the labouring classes. Curiously enough, advantage has only been taken of this in one rural district in the whole of England, and that in a West Suffolk parish. If I give briefly an account of this it will show you the difficulties we encounter, and how they may be met. In that case, although a Medical Officer had made a report, it was not until a friend of mine took the matter up and insisted that the reports of the Medical Officer should be attended to that anything was done. The result was that the Sanitary Authority was obliged to take notice of the reports; and for the first and only time a request was sent to the County Council asking them to hold an enquiry, and an enquiry was held. I was present at this and I inspected the houses on more than one occasion. The evidence brought before the Commissioner appointed by the County Council was sufficient to convince him that the

houses were not fit for habitation, and that more houses were required. The result was that ultimately the district authority were obliged to acknowledge the necessity, the County Council gave their permission, and since then eight cottages have been put up. That relieves the congestion in that particular village. Are all those houses inhabited by the working classes? I do not think so. On the other hand, though all the people who have gone into those houses may not be agricultural labourers by their moving from one house to another there has been a general moving up from the bottom. The result is, the worst houses have been left uninhabited. In another district in which serious complaint was made there was an attempt to put in force the Act, plans were got out, and everything was ready for an enquiry. It was shown that money could be borrowed to build the houses, and the amount which would have to be paid back was the estimated rental plus £30 a year for thirty years. The *Guardians* said, This village wants seven or eight cottages; they may have them, but they must bear the expense. The whole thing in this second instance struck on this rock, and because it was a very poor parish and could not afford to raise this £30 a year, it has to go without the cottages. It is no question of loss, because the money is paid back in the course of thirty years, principal and interest, and the cottages then become the property of the parish. It is simply who is to be out of pocket for a certain length of time. That was one of the rocks we struck upon. Another was, that the largest landowner in the parish, who owned three-fourths of the parish, owned only a few cottages. All the cottages in the parish were owned by smaller landlords, and this large landholder would not provide sufficient cottages for the labourers on his land. The result of the agitation has however, been most satisfactory. Although we did not get cottages built by the Sanitary Authority or the landlord, other landlords in the neighbourhood have since built the cottages, and the congestion has been relieved. Apart from any actual benefit, there is the

fact that these agitations are educating the public, and doing a great amount of good. (Cheers.)

DR. HAILEY (Medical Officer of Health for Newport Pagnell) : Perhaps I might say a few words on this Housing of the Working Classes Act, as I think that my own Authority in my own district did really try to put this Act in force. We began about the year 1891, and since then, up to the present time, there have been somewhere about 80 houses condemned under this Act, and that certainly is not nearly all that ought to have been condemned. We have found that it was absolutely impossible to go on. According to the directions of the Act we have made more or less an inspection of the district, and all those houses that ought to be condemned we notified ; but we found that if we condemned those houses there was simply nowhere else for people to go to. Only the very worst could be taken, and then we found that the process could not be gone on with, because if we only took just a few of the worst, and the houses were closed, there would be nowhere for the people to go to. And therefore, as I say, there were 80 proceeded with in some sort of way, and I believe about half of those were eventually closed, and some of them pulled down. That applies to about 40 in four years in a district which includes somewhere about 5,000 houses. The conclusion, I think, we all came to in the Newport district was, that the Act could only be put in force in one or two ways. One was to do it very slowly indeed, just do away with a few houses each year, the very worst houses ; or you could put in force the latter part of the Act and build new cottages. Hardly any Local Authority has yet done that, because of the expense. I think it comes to this : In the rural districts, anywhere in Buckinghamshire, if the Authority does not build new cottages, the Act is very little used. If it is

put in force over a great number of years, at the end of that time some good may be found to be done.

DR. BULSTRODE (of the Local Government Board) : I much regret I was unable to hear the original paper that was read, and therefore it is impossible for me to make any remarks upon it. There is no doubt that the bringing into operation of the Housing of the Working Classes Acts in rural districts is a difficult problem, and you have heard from Dr. Thresh and Dr. Hailey the obstacles in the way of it. And yet there is good work that can be accomplished, and in many parts of the country is being carried on under the Housing of the Working Classes Act of 1890. Under the Local Government Act of 1894 there will be considerable power put into the hands of the Parish Councils to complain to the County Councils with regard to the operations of the Public Health Acts, and some good may accrue in that respect. There is one practical suggestion which I may offer. Travelling about the country, as I do myself, it is impossible not to be impressed with the miserable hovels in which the poor sometimes live. (Hear, hear.) They are hovels in this way—they have no dampproof course, the windows do not open, they have little light, and the excrement and refuse disposal is of the most primitive kind. I think that can be prevented in the future, and prevented very easily indeed. It can be prevented by every rural authority obtaining urban powers and putting proper bye-laws into force, and by resolving that in the future no such uninhabitable dwellings as at present disfigure their district shall be erected. I think that that is a suggestion which might very well be acted upon, and if it is acted upon it will be one good result of this very interesting Conference. (Cheers.)

ISOLATION HOSPITALS.

BY DR. G. PHILLPOT, *Aylesbury*.

GENTLEMEN,—The subject of Isolation Hospitals has already been discussed very ably, both at the last Conference and the meetings of Medical Officers of Health of this county; but it is a subject of such importance that I had much pleasure in acquiescing in Mr. Verney's request, to again bring it under your notice in the course of a short paper.

During the last few years the advances in the science of Bacteriology have been so great that we are now able to combat the various zymotic diseases in their different stages much more scientifically than before. One of the chief results is the system of prophylaxis, which is now being followed out in various manners; and it is universally agreed that isolation in a hospital is of the utmost importance.

There are many interesting points in relation to isolation which might be profitably discussed, but I desire merely to draw your attention to the following three:—

Firstly.—Hospital Isolation as a necessary adjunct to notification.

Secondly.—Isolation as the greatest prophylactic for cutting short an epidemic.

Thirdly.—Isolation as an important factor in the reduction of mortality.

Firstly.—It is very evident that the Compulsory Notification Act, as it stands, is incomplete so long as no hospital accommodation is provided for the reception of patients suffering from the various zymotic affections. Dr. Groves aptly remarks: "Notification points out the spot at which poison is being generated, disinfection destroys it, but isolation alone will render its production harmless." It is almost universally acknowledged that isolation privately carried out in the smaller houses of poorer districts is ineffectual, for it is necessarily incomplete. At the same time, there are times, places, and circumstances at which, and in which, private isolation must be carried out at home; but as this is usually in the larger houses of the better

class, the risk of danger to the public at large is not so great, as there are more facilities for the directions given by the medical attendant being executed. It required some time to educate the public to appreciate the value of the Compulsory Notification Act, which even now in some places has not been adopted; thus exemplifying its great fault, that it is not compulsory on all local authorities to do so. We are now entering on the second campaign, and must fight boldly and fearlessly for the essential complement to the former beneficent legislative Act. But this, too, is unfortunately weak, in so far as it is permissive, whereas it should be compulsory, as I shall attempt to show later. The health of the community is the first great principle on which such Acts should be made to work; and though one particular family may feel aggrieved at the compulsory removal of a member suffering from an infectious disease, it is doubly hard to compel his next-door neighbour to run the risk of illness, extra expense, and maybe loss of life, on account of the former's persistent refusal to allow of the source of infection being isolated efficiently. No Medical Officer of Health can fail to realise this when day after day he receives notification of the spread of an epidemic whose progress he is powerless to stay if no efficient Isolation Hospital be provided.

Secondly.—This brings us to the second point—viz., that an Isolation Hospital is the greatest prophylactic we possess, and is capable of cutting short an epidemic, thus saving illness, expense, and life, not only to the individuals primarily affected, but also to countless fellow-creatures who may become infected secondarily. Though there are certain diseases, such as measles, whose prevention it is more difficult to secure, still the great majority of epidemics are amenable to this form of treatment when properly carried out at the right time.

I would also insist that to each hospital there be attached an efficient disinfecting chamber and mortuary. At the time of the

removal of the patient to the hospital as much as possible of his clothes, bedding, etc., should be likewise removed and at once placed in the disinfecting chamber, so that the isolation may be as complete as possible. At the same time, local disinfecting measures must be at once carried out in the house, under the direction of the medical attendant or sanitary inspector. In the event of death of an infectious patient in hospital, isolation of the body can be continued in the mortuary; and in the case of death from an infectious disease in a private house it might be well to have powers to order the removal of the body either to the hospital or public mortuary, if it be deemed necessary in the interest of public health. Under no circumstances should the removal of the body from the hospital mortuary to the house be permitted.

Thirdly.—There is no doubt that it is impossible to get such satisfactory results as regards mortality in certain diseases in private houses as is obtained in an Isolation Hospital, with trained nursing staff. My personal experience of diphtheria treated at home and in a temporary Isolation Hospital strongly points to this; for during the Quainton epidemic of 1891 and 1892 the death-rate at home in 20 cases was 50 per cent., whereas in 17 cases treated in the Isolation Hospital it was 17·6 per cent. Next year 28 cases of diphtheria in the Rural Sanitary District were treated at home with a mortality of 23·3 per cent., while in 1893 and 1894, 18 cases treated at home had a mortality of 27·7 per cent. The lower mortality in 1892 and 1893—viz., 23·3 per cent.—may in part be due to the fact that through private liberality a trained nurse was available in many cases, whereas in the following year no such nursing was available on account of the widespread distribution of the disease.

The saving of 6 per cent. (far more of 10 or 32 per cent.) of lives in a Rural Sanitary District from one disease should surely be a sufficiently vivid object lesson to the ratepayers to stir them to compel the local authorities to take the steps necessary for the adoption of the Isolation Hospitals Act, to

which I now desire to briefly draw your attention.

The County Council may provide for the establishment of Isolation Hospitals in any district within their county, on application being made to them, and proof adduced from one of two sources. Either one of the local authorities having jurisdiction in the county may make application, or an application may be made by any number of ratepayers, not less than 25 in any contributory place, as defined by the Act; but the County Council may take the initiative, and may direct an inquiry to be made by the Medical Officers of Health of the county as to the necessity of an Isolation Hospital being established. In the event of this being recommended by him, they shall conduct a local inquiry by a committee, as if a petition from the local authority or ratepayers had been presented, but they shall not take steps for the constitution of a Hospital District unless the local authority assent or are proved to be unable or unwilling to make suitable hospital accommodation. When a Hospital District has been constituted a committee shall be formed by the County Council, but where a Hospital District is under the jurisdiction of a corporate local authority the County Council may invest such local authority with all the powers of a hospital committee under the Act, thereby enabling the local authority to purchase or lease any land for the purpose of erecting an Isolation Hospital thereon, and also giving it powers to make all necessary rules and regulations for the conduct and management of the hospital and the patients therein. The hospital committee may, as occasion require, provide any accommodation in addition to the existing accommodation, or they may establish in their district hospitals in cottages or otherwise, either in addition to or instead of a central hospital, or provide such temporary accommodation before they have established a permanent hospital. It is thus seen that full power is given to local authorities to erect Isolation Hospitals, but that the removal of a patient to the hospital suffering from infectious disease is permissive;

and this leaves too great latitude to the mass of the country people, to decide not only on their own account, but also for their neighbours, whether they shall allow their houses to be hotbeds of disease and sources of irradicable infection and danger to the community at large.

In conclusion, I cannot do better than recapitulate the proposition which Dr. De'Ath brought forward at the meeting of Bucks Medical Officers of Health in July 1893. Inasmuch as Eton is the only place in Bucks where there is any isolation accommodation, the county should be divided into districts, each of which should be provided with an Isolation Hospital, not more than six miles apart; that permanent structures be provided with one bed for every 1,000 of the inhabitants; that ambulance conveyances and disinfecting apparatus, in proportion of one to every three hospitals, be provided; that a small staff of nurses be maintained at Aylesbury, or elsewhere; and that all notifiable infectious cases be admitted free of cost; that the District Medical Officer of Health be appointed Medical Officer of the Isolation Hospital or Hospitals in the district at a salary of £5 per bed, and that he treat all cases, unless the patient desires his or her usual medical attendant, who must in any case sign the admission order, which must be countersigned by the District Medical Officer, who must satisfy himself as to the existence of the disease immediately after admission, and I venture to suggest that if these recommendations are adopted, it will be a boon and blessing to the County of Bucks.

REV. P. L. CAUTLEY: I only rise to emphasise the importance of having Isolation Hospitals in times of epidemics. I know I am treading on delicate ground, but Dr. Phillpot must kindly excuse me. I believe he is perfectly right as to his registered figures, only I put them in a different way. Some children died before the disease was recognised to be diphtheria. The diagnosis of the disease was very difficult in these cases, and the doctors, with their after knowledge of the epidemic, would have returned

them as diphtheric cases. I believe that about twenty-four died out of hospital, and only two died in the hospital. These figures speak for themselves. The epidemic and the deaths were stopped. But what without that Isolation Hospital we should have come to I do not know. Dr. Phillpot said it was a good thing to have an Isolation Hospital in every district, but most of us can have one in every parish, as nearly every parish has a schoolroom, which can with a little contrivance be turned into a hospital; and I believe Quainton School is the first school in England which has been so utilised. Directly the epidemic became serious I thought, What can I do? The Baron offered to help me, and when a Rothschild offers to help, you do not feel timid! (Laughter.) Within 24 hours he had sent me down two trained nurses. I asked the Education Department to let me turn the infant school, with the mistress' house adjoining, which opened into the school, into a hospital. They dallied and shallied, and Captain Pigott and myself, being trustees, determined to do it without their leave. Soon afterwards there appeared in the columns of the *Daily News* an article called "Death in our Villages," in which Quainton was mentioned by name, and following that I received a telegram from the Education Department saying, "You can turn your school into a hospital." But I had already done so. I was not going to wait. We opened the schoolroom into a hospital; the schoolmistress kindly turning out of her home, and the nurses went into her house. We had at first some difficulty with the parents of the stricken children, but common sense soon overcame these difficulties. If ever there comes a serious epidemic in our villages I am certain you cannot so quickly and so cheaply put a stop to it as by an Isolation Hospital. One gentleman has just asked, where is the money for these improvements to come from. It must come, said he, from the rates. No, say I, why not from the taxes. Let us all fairly and equally bear the burden. Do not tax only the landlord, farmer, and labourer, for so now it

really is, but your professional man also. For instance, say that a landlord, farmer, or clergyman has an income of £1,000 a year, of which £500 is derived from land or tithe, and £500 from money in the funds. Upon the £500 from land or tithe he pays about 5s. in the £ rates and taxes, more or less, according to the locality in which he resides. On the £500 from the Funds he merely pays the Income Tax of a few pence in the £. Is this fair? The money required ought not to come from the rates only, but from the taxes also. We want a readjustment of taxation. (Cheers.)

DR. SANDELL (of Leighton Buzzard) : It is no wish of mine to supplement the good speeches that have been made in this room to-day ; but on isolation I am very strong, because, and I am sure every Health Officer is alive to the fact, that without notification and isolation it is utterly impossible to arrest the spreading of infectious diseases. Certain members of Rural Authorities frequently treat the matter with indifference, but would those farmers allow one of their animals afflicted with the foot and mouth disease, or swine fever, to remain among the others? Certainly not ; they would remove the animal from the herd, have it at once slaughtered and buried, that the rest should not become infected. Are we then worse than cattle that those of us who are unfortunately smitten with infectious disease should not be promptly isolated in suitable infectious hospitals to protect the rest of the community? Dr. Phillpot has made the remark that the death-rate of patients is not nearly so high when treated in hospital. This I can well endorse from experience in the epidemic of diphtheria at Ivinghoe in my district. At the commencement of this epidemic we had eleven cases in five days, six of which proved fatal through bad sanitary arrangements in the dwellings, and want of judicious nursing. For the time I could not see how to isolate the cases, our Sanitary Hospital at Leighton being full of scarlet fever. A Sanitary Committee, however, was formed to consider the matter, and although I could not get the majority to

erect a proper hospital for that portion of the district, one of their number (the Vicar) kindly allowed us to turn one of his houses of eight rooms into a temporary one, and in five hours beds were provided, nurses engaged from London, and fair arrangements made, the result being that although we have had sixteen cases admitted, only one has been lost, the others being now convalescent. (Cheers.) There is one thing I would like to bring before your notice, which is so forcibly recommended by Dr. Thorn Thorn, who at all times gives practical advice, and that is, "That hospitals should be provided for the epidemics, and not wait until they are upon us." (Cheers.) It appears so ludicrous to talk of isolation of the patients when there is no place to isolate them in, until perhaps some temporary provision is hurriedly made, per force, in the midst of an epidemic. Dr. Phillpot further states that there should be a hospital every six miles. In my opinion there should be a small one in every large village or town, so that the first case can be removed that occurs to prevent others following ; that is isolation. I know there is a difficulty in bringing this state of sanitation about. There is the first difficulty of obtaining a proper site for the hospital ; the difficulty of getting it erected ; and last but not least when you have it, the difficulty in getting the patients removed into it, and will be until the public is educated to use it and see its necessity and worth. Another difficulty sometimes arises. During the epidemic at Ivinghoe I got them all in hospital with the exception of one family of six patients. That one family unfortunately (I say unfortunately advisedly), had a house with accommodation as to space, but had not the sense to keep the children isolated during convalescence, for when they were half over the disease, he allowed them to come down into the general or living room where persons came in and out, carrying, of course, the infection. What was the consequence? We had nearly got rid of the disease, when a man in his employ, living at another part of the village, goes to his house, his child contracts the disease and

dies, and another outbreak follows. I cannot speak too strongly on the subject of isolation in infectious diseases. Isolation is the principal thing, and without it we are powerless.

Mr. BRAKSPEAR (Chairman of the Henley Rural Sanitary Authority): I hope I shall not be looked upon as an intruder if as Chairman of a Sanitary Authority situated outside this county, I give to this Conference the experiences of an Isolation Hospital which ought to have a considerable amount of interest for Buckinghamshire men. The Henley Rural Sanitary Authority, as you may know, has up to the present time had in it three Buckinghamshire parishes, and I think the Hospital was built almost entirely on account of a very serious outbreak of diphtheria which occurring in a Buckinghamshire parish a few years ago, we had very great difficulty in stamping out, and which we should not have succeeded in stamping out but for the liberality of one of the landlords, who allowed us the use of an empty farmhouse for an Isolation Hospital. We had the use of that farmhouse, and we were able to stamp out that epidemic; but it led to a very good thing for our Authority. For through the great liberality of one whom we were all proud of, the late Mr. W. H. Smith, we had the offer made to us of a fully equipped Isolation Hospital, which is a model of the sort of thing that ought to be under the control of every Sanitary Authority. The amount of good that that Hospital has done already is incalculable. We had a very awkward epidemic of scarlet-fever among some of the villages upon our hills which we found almost impossible to stamp out. Directly we thought it was stamped out it broke out again in a different part. It was traced to the schools, and there is no doubt that it was spread through the schools. Directly we had the hospital in work we were able to send the children there—a fresh case would be sent there directly—and very shortly we stamped out the epidemic. We have done the same in two or three other cases. Another great use that we have been able to make of the Hospital, and one that will come home to every Sanitary Authority, I think,

is that on two occasions we have had an epidemic of small-pox brought into the Casual Ward of the Union by vagrants. A man came in one night, and when he was bathed they noticed that he was covered with spots. He was immediately isolated and examined by the Medical Officer, who placed him under observation in the Isolation Ward of the Workhouse, and the next day it was declared to be small-pox. We were able to remove that man to the Isolation Hospital. He was there for eight weeks, and then discharged cured. It was a most extraordinary thing that upon the very same day he was discharged cured another tramp was discovered with the disease, and we were, after a certain time, able to send him also on his way cured. Of course it was a great expense. The only occasion on which we had to apply for compulsory power to remove a child was not very long ago, when there was a child taken ill with scarlet-fever at a public-house. The parents refused to have the child removed to the Hospital, although it was quite close. We applied for compulsory powers. There was no further difficulty about it, and the child is now, I think, quite convalescent. Of course, as I say, we have been peculiarly lucky in having this hospital presented to us. The land—five acres, and within about a mile of the town—was presented by one gentleman. The hospital was built entirely regardless of expense, the building and fitting up costing something like £12,000. We had an ambulance presented to us, and we are, therefore, able to hire a horse and send a good ambulance to any part of the district for cases. Of course every Rural Sanitary Authority cannot expect to have a hospital like this. But judging from our own experience, I would urge upon every Sanitary Authority the necessity of providing a hospital something of the same sort. The question of cost of course, is the great difficulty. At the same time, although the cost may be considerable, we never know what expenses it may in the end save. (Hear, hear.) I hope my experience may be of use to others.

Dr. BULSTRODE: The observations I shall offer on this point will be equally scanty with those I have offered on others. I must confess I have been educated in the belief that an Isolation Hospital is an absolute necessity for every district properly administered; and it is a matter of considerable astonishment to me to hear that in the county of Buckingham there is but one Isolation Hospital. The necessity for an Isolation Hospital seems to me a self-evident proposition, and I shall not pretend to discuss the subject now. It is absolutely impossible to carry out proper isolation in the homes of the poor, and more especially is this the case in diseases which have a long convalescence, such as scarlet-fever. Practical experience shows that possibly with good houses you may isolate scarlet-fever for a week; but after the patient is to all intents and purposes well, and is only infectious, the parents and the rest of the family cease to regard the matter as of any private moment, and the public moment I am afraid does not always present itself to them. One great point to bear in mind is to make Isolation Hospitals as attractive as possible, and for that reason it is necessary that they should be permanent, structures, and not wooden huts run up under the stress of an epidemic, but good, well-considered edifices, with plenty of ground around them for recreative purposes, and there should also be a competent and kind matron over nursing staff. Of course a good mortuary and other details are necessary to a well-regulated hospital. It is only where a hospital has been put up under the stress of an epidemic, and at small cost, that these things are neglected. Experience has shown that it is not advisable to make any charge for admission into fever hospitals, because when any charge is made it often precludes parents from sending their children; and where a graduated charge is made it introduces social and pecuniary distinctions which are very undesirable. Personally, I have had considerable experience of these hospitals, having spent four years of my life in one; but I think it is unnecessary to dilate upon the elements of the question.

I am sure we must all have listened to the debates which have taken place at this meeting with very great interest, and one cannot feel otherwise than that meetings of this kind are a means of bringing about the popular education, to which I referred in my opening remarks. All of us who are interested in public health must, I think, feel a deep debt of gratitude to Mr. Verney (cheers), and also to the Sanitary Committee, of which he is Chairman, for having brought about this eminently successful conference (renewed cheers), and for bringing together so many well able to speak on the subjects discussed. The proposal to do away with the Sanitary Committee seems, on the face of it, to be an absurd proposal. (Hear, hear.) There is the greatest necessity for having all the questions of public health thoroughly sifted before they come before the Council. Whether they have reference to an Urban Sanitary Authority, Rural Sanitary Authority, or County Council, I take it there is a great necessity to have all questions well digested, and presented in a palatable and easily understandable form to the full authority, so that unnecessary details may not be discussed in public, and to the detriment of those who are possibly at fault, and possibly not at fault. (Cheers.)

The CHAIRMAN: I am sure we are very much obliged to Dr. Bulstrode for the remarks he has just made. I want to ask you all to pass an unanimous vote of thanks to the readers of the papers at this Conference and to the speakers, and particularly to our visitors who have come here, at great trouble to themselves, many miles, in order to help us in our proceedings to-day. (Cheers.) I am quite sure that you will agree with me that we owe a deep debt of gratitude to a gentleman in Sir Thomas Crawford's position who will come and show his sympathy and interest in the subject here in this county (cheers); and we owe him our best thanks for having inaugurated our Conference to-day. I am sure you will equally agree that our thanks are due to those other gentlemen who have come from a long distance to take part in our proceedings, and also to the

Medical Officers of Health and others who read papers this afternoon. I therefore ask you to pass an unanimous vote of thanks to these gentlemen, and to allow me, as your Chairman, to send that vote of thanks to the gentlemen to whom I have alluded. (Loud cheers.)

The votes of thanks were passed with acclamation.

MR. HORWOOD: Before this Conference is closed, it would be the desire of every gentleman here to tender to you, Sir, thanks for

having taken the trouble of organising and bringing this Conference to a successful issue. (Cheers.)

The vote of thanks was accorded with acclamation.

THE CHAIRMAN, in reply, said: I am very much obliged to you, gentlemen, for your kind expression of thanks to me. It has been the greatest possible pleasure to me to meet you here, and I hope the Conference may be a lasting good to our county. (Cheers.)

The meeting then terminated.

